# THE DATASHEET OF

# BPSC00070745101M00

# BPSC Series

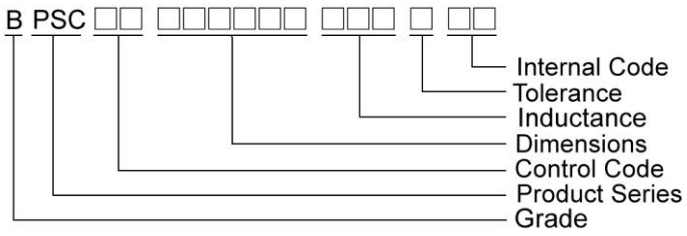
## Features

- RoHS, Halogen Free and REACH Compliance
- Magnetic shielded
- Various package size and wide inductance range

## Applications

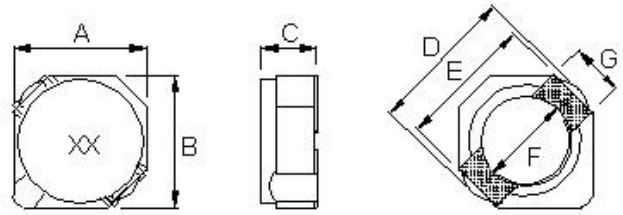
- AP Routers
- STBs
- LCD TVs and monitors
- Game consoles
- LED lightings
- DC/DC converters

## Product Identification

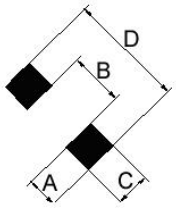



## Shape and Dimensions

BPSC00030312/030316/030320




## Recommended Pattern

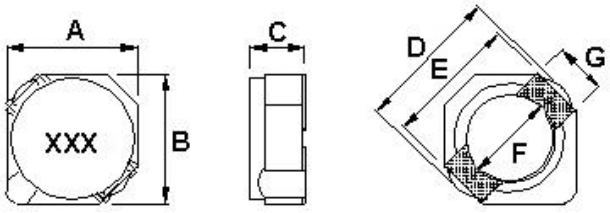



Dimension in mm

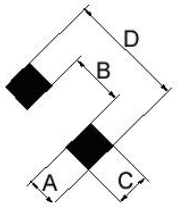
| TYPE | Shape and Dimensions | | | | | | | Recommended Pattern | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | A | B | C | D | E | F | G | A | B | C | D |
| BPSC00030316 | $3.2^{+0}$ | $3.2^{+0}$ | $1.55^{+0}$ | $4.5^{+0}$ | 3.3 | 2.1 | 1.0 | 1.3 | 1.7 | 1.3 | 4.3 |
| BPSC00303020 | $3.2^{+0}$ | $3.2^{+0}$ | $2.0^{+0}$ | $4.5^{+0}$ | 3.3 | 2.1 | 1.0 | 1.3 | 1.7 | 1.3 | 4.3 |

## Shape and Dimensions

BPSC00040412


## Recommended Pattern




Dimension in mm

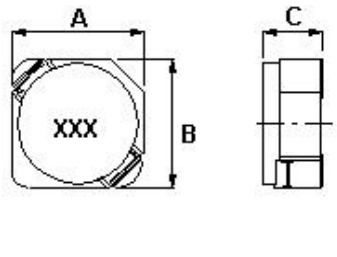
| TYPE | Shape and Dimensions | | | | | | | Recommended Pattern | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | A | B | C | D | E | F | G | A | B | C | D |
| BPSC00040412 | $4^{+0}$ | $4^{+0}$ | $1.2^{+0}$ | $5.2^{+0}$ | 4.4 | 2.8 | 1.1 | 1.4 | 2.4 | 1.5 | 5.2 |

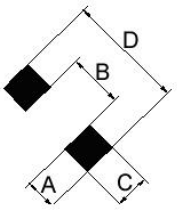
# SMD Shielded Power Inductors - BPSC Series

## Shape and Dimensions

## Recommended Pattern

**BPSC00040418**

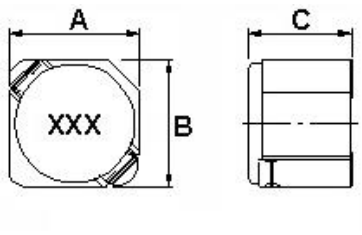

Dimensions in mm

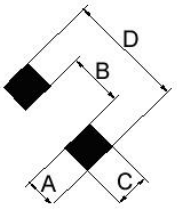
| TYPE | Shape and Dimensions | | | | | | | Recommended Pattern | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | A | B | C | D | E | F | G | A | B | C | D |
| BPSC00040418 | $4^{+0}$ | $4^{+0}$ | $1.8^{+0}$ | $5.2^{+0}$ | 4.4Typ | $1.4^{+0}$ | 1.1Typ | 1.4 | 2.4 | 1.5 | 5.2 |

## Shape and Dimensions

## Recommended Pattern

**BPSC00404030**


Dimension in mm

| TYPE | Shape and Dimensions | | | | | | Recommended Pattern | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | A | B | C | D | E | F | A | B | C | D |
| BPSC00404030 | $4^{+0}$ | $4^{+0}$ | $3^{+0}$ | 4.4 | 2.8 | 1.1 | 1.4 | 2.4 | 1.5 | 5.2 |

## Electrical Characteristics

| Part Number | Inductance (μH) | Tolerance (±%) | Test Frequency | RDC (Ω)Max | Isat(A) Max(Typ.) | Irms (A)Typ. | Marking |
|---|---|---|---|---|---|---|---|
| BPSC00030316R47□00 | 0.47 | 30 | 100 kHz,1 V | 0.04 | 2.00(2.80) | | AO |
| BPSC000303161R5□00 | 1.5 | 30 | 100 kHz,1 V | 0.063 | 1.40(1.80) | 2 | BF |
| BPSC000303161R8□00 | 1.8 | 30 | 100 kHz,1 V | 0.075 | 1.30(1.70) | 1.8 | BI |
| BPSC000303162R2□00 | 2.2 | 30 | 100 kHz,1 V | 0.094 | 1.20(1.60) | 1.6 | CC |
| BPSC000303162R7□00 | 2.7 | 30 | 100 kHz,1 V | 0.106 | 1.10(1.40) | 1.4 | CH |
| BPSC000303163R3□00 | 3.3 | 30 | 100 kHz,1 V | 0.125 | 0.95(1.20) | 1.24 | DD |
| BPSC000303163R9□00 | 3.9 | 30 | 100 kHz,1 V | 0.138 | 0.92(1.10) | 1.12 | DJ |
| BPSC000303164R1□00 | 4.1 | 20,30 | 100 kHz,1 V | 0.169 | 0.80(1.00) | 1 | EA |
| BPSC000303164R7□00 | 4.7 | 20,30 | 100 kHz,1 V | 0.169 | 0.80(1.00) | 1 | EH |
| BPSC000303165R6□00 | 5.6 | 20,30 | 100 kHz,1 V | 0.188 | 0.76(0.95) | 0.98 | FG |
| BPSC000303166R8□00 | 6.8 | 20,30 | 100 kHz,1 V | 0.213 | 0.71(0.88) | 0.92 | GI |
| BPSC000303168R2□00 | 8.2 | 20,30 | 100 kHz,1 V | 0.281 | 0.64(0.80) | 0.8 | IC |
| BPSC00030316100□00 | 10 | 20,30 | 100 kHz,1 V | 0.294 | 0.57(0.72) | 0.76 | KA |
| BPSC00030316120□00 | 12 | 20,30 | 100 kHz,1 V | 0.394 | 0.52(0.65) | 0.64 | QA |

**Note: When ordering, please specify tolerance code. Tolerance: M=±20% , T=±30%**

- Operating temperature range－30℃～100℃(Including self - temperature rise)
- Isat for Inductance drop 35% from its value with current
- Irms for a 40℃ temperature rise from 25℃ ambient.
- RDC test method: place testing device to the 2 solder ends of wounding and test the value.
- Measure Equipment：
  L：Agilent/ E4980 or HP4284A
  RDC：Chroma 16502
  Isat：HP4284+42841A or WK3260B+WK3265B
  Irms：HP4284+42841A or WK3260B+WK3265B

## Electrical Characteristics

| Part Number | Inductance (μH) | Tolerance (±%) | Test Frequency | RDC (Ω)Max | Isat(A) Max(Typ.) | Irms (A)Typ. | Marking |
|---|---|---|---|---|---|---|---|
| BPSC000303202R2□LD | 2.2 | 20,30 | 100 kHz,1V | 0.041 | 0.85(1.10) | 2.3 | CC |
| BPSC000303203R3□LD | 3.3 | 20,30 | 100 kHz,1V | 0.054 | 0.75(0.95) | 2.1 | DD |
| BPSC000303204R7□LD | 4.7 | 20,30 | 100 kHz,1V | 0.078 | 0.63(0.78) | 1.65 | EH |
| BPSC000303206R8□LD | 6.8 | 20,30 | 100 kHz,1V | 0.106 | 0.52(0.65) | 1.32 | GI |
| BPSC00030320100□LD | 10 | 20,30 | 100 kHz,1V | 0.18 | 0.43(0.53) | 1 | KA |
| BPSC00030320150□LD | 15 | 20,30 | 100 kHz,1V | 0.22 | 0.35(0.45) | 0.8 | MA |
| BPSC00030320220□LD | 22 | 20,30 | 100 kHz,1V | 0.32 | 0.30(0.36) | 0.68 | LA |
| BPSC00030320330□LD | 33 | 20,30 | 100 kHz,1V | 0.46 | 0.24(0.31) | 0.56 | NA |
| BPSC00030320390□LD | 39 | 20,30 | 100 kHz,1V | 0.6 | 0.21(0.28) | | PA |
| BPSC00030320470□LD | 47 | 20,30 | 100 kHz,1V | 0.66 | 0.19(0.24) | 0.48 | OA |

**Note: When ordering, please specify tolerance code. Tolerance: M=±20% , T=±30%**

- Operating temperature range－30℃～100℃(Including self - temperature rise)
- Isat for Inductance drop 35% from its value with current
- Irms for a 40℃ temperature rise from 25℃ ambient.
- RDC test method: place testing device to the 2 solder ends of wounding and test the value.
- Measure Equipment：
  L：Agilent/ E4980 or HP4284A
  RDC：Chroma 16502
  Isat：HP4284+42841A or WK3260B+WK3265B
  Irms：HP4284+42841A or WK3260B+WK3265B

## Electrical Characteristics

| Part Number | Inductance (μH) | Tolerance (±%) | Test Frequency | RDC (Ω)Max | Isat(A) Max(Typ.) | Irms (A)Typ. | Marking |
|---|---|---|---|---|---|---|---|
| BPSC000303201R5□HP | 1.5 | 30 | 100kHz,1V | 0.05 | 1.90(2.40) | 2.2 | BF |
| BPSC000303201R7□HP | 1.7 | 20,30 | 100kHz,1V | 0.05 | 1.85(2.40) | 2.2 | BH |
| BPSC000303202R2□HP | 2.2 | 20,30 | 100kHz,1V | 0.06 | 1.60(2.30) | 1.9 | CC |
| BPSC000303203R3□HP | 3.3 | 20,30 | 100kHz,1V | 0.097 | 1.45(1.80) | 1.55 | DD |
| BPSC000303204R7□HP | 4.7 | 20,30 | 100kHz,1V | 0.14 | 1.00(1.50) | 1.2 | EH |
| BPSC000303206R3□HP | 6.3 | 20,30 | 100kHz,1V | 0.18 | 0.96(1.30) | 1.15 | GD |
| BPSC000303206R8□HP | 6.8 | 20,30 | 100kHz,1V | 0.195 | 0.95(1.20) | 1.1 | GI |
| BPSC00030320100□HP | 10 | 20,30 | 100kHz,1V | 0.285 | 0.85(1.00) | 0.9 | KA |
| BPSC00030320150□HP | 15 | 20,30 | 100kHz,1V | 0.41 | 0.67(0.83) | 0.64 | MA |
| BPSC00030320220□HP | 22 | 20,30 | 100kHz,1V | 0.65 | 0.50(0.67) | 0.6 | LA |

**Note: When ordering, please specify tolerance code. Tolerance: M=±20% , T=±30%**

- Operating temperature range－30℃～100℃(Including self - temperature rise)
- Isat for Inductance drop 35% from its value with current
- Irms for a 40℃ temperature rise from 25℃ ambient.
- RDC test method: place testing device to the 2 solder ends of wounding and test the value.
- Measure Equipment：
  L：Agilent/ E4980 or HP4284A
  RDC：Chroma 16502
  Isat：HP4284+42841A or WK3260B+WK3265B
  Irms：HP4284+42841A or WK3260B+WK3265B

## Electrical Characteristics

| Part Number | Inductance (μH) | Tolerance (±%) | Test Frequency | RDC (Ω)Max | Rated Current (A) | Irms (A)Typ. | Marking |
|---|---|---|---|---|---|---|---|
| BPSC000404122R7□00 | 2.7 | 30 | 100 kHz,1 V | 0.078 | 0.53 | 1.82 | 2R7 |
| BPSC000404124R7□00 | 4.7 | 20,30 | 100 kHz,1 V | 0.123 | 0.4 | 1.38 | 4R7 |
| BPSC000404126R8□00 | 6.8 | 30 | 100 kHz,1 V | 0.18 | 0.34 | 1.05 | 6R8 |
| BPSC000404128R2□00 | 8.2 | 30 | 100 kHz,1 V | 0.204 | 0.32 | 0.93 | 8R2 |
| BPSC00040412100□00 | 10 | 20,30 | 100 kHz,1 V | 0.24 | 0.28 | 0.9 | 100 |
| BPSC00040412120□00 | 12 | 20,30 | 100 kHz,1 V | 0.276 | 0.25 | 0.81 | 120 |
| BPSC00040412150□00 | 15 | 20,30 | 100 kHz,1 V | 0.372 | 0.23 | 0.68 | 150 |
| BPSC00040412180□00 | 18 | 20,30 | 100 kHz,1 V | 0.468 | 0.21 | 0.58 | 180 |
| BPSC00040412220□00 | 22 | 20,30 | 100 kHz,1 V | 0.54 | 0.19 | 0.53 | 220 |
| BPSC00040412270□00 | 27 | 20,30 | 100 kHz,1 V | 0.726 | 0.17 | 0.48 | 270 |
| BPSC00040412330□00 | 33 | 20,30 | 100 kHz,1 V | 0.822 | 0.15 | 0.41 | 330 |
| BPSC00040412390□00 | 39 | 20,30 | 100 kHz,1 V | 0.942 | 0.14 | 0.4 | 390 |

**Note: When ordering, please specify tolerance code. Tolerance: M=±20% , T=±30%**

- Operating temperature range－30℃～100℃(Including self - temperature rise)
- Rated current for Inductance drop 35% from its value with current
- Irms for a 40℃ temperature rise from 25℃ ambient.
- RDC test method: place testing device to the 2 solder ends of wounding and test the value.
- Measure Equipment：
  L：Agilent/ E4980 or HP4284A
  RDC：Chroma 16502
  Rated current：HP4284+42841A or WK3260B+WK3265B
  Irms：HP4284+42841A or WK3260B+WK3265B

## Electrical Characteristics

| Part Number | Inductance (μH) | Tolerance (±%) | Test Frequency | RDC (Ω)Max | Rated Current (A) | Irms (A)Typ. | Marking |
|---|---|---|---|---|---|---|---|
| BPSC00040412R60□HP | 0.6 | 30 | 100 kHz,1 V | 0.059 | 2.9 | 1.8 | R60 |
| BPSC000404121R2□HP | 1.2 | 30 | 100 kHz,1 V | 0.082 | 2 | 1.7 | 1R2 |
| BPSC000404121R5□HP | 1.5 | 30 | 100 kHz,1 V | 0.104 | 1.85 | 1.45 | 1R5 |
| BPSC000404122R2□HP | 2.2 | 30 | 100 kHz,1 V | 0.143 | 1.6 | 1.15 | 2R2 |
| BPSC000404123R3□HP | 3.3 | 30 | 100 kHz,1 V | 0.182 | 1.25 | 0.95 | 3R3 |
| BPSC000404124R7□HP | 4.7 | 30 | 100 kHz,1 V | 0.2 | 1.2 | 0.9 | 4R7 |
| BPSC000404126R8□HP | 6.8 | 30 | 100 kHz,1 V | 0.377 | 0.85 | 0.7 | 6R8 |
| BPSC00040412100□HP | 10 | 20,30 | 100 kHz,1 V | 0.413 | 0.8 | 0.6 | 100 |
| BPSC00040412120□HP | 12 | 20,30 | 100 kHz,1 V | 0.585 | 0.64 | 0.48 | 120 |
| BPSC00040412150□HP | 15 | 20,30 | 100 kHz,1 V | 0.653 | 0.58 | 0.45 | 150 |
| BPSC00040412180□HP | 18 | 20,30 | 100 kHz,1 V | 0.888 | 0.52 | 0.4 | 180 |
| BPSC00040412220□HP | 22 | 20,30 | 100 kHz,1 V | 0.925 | 0.53 | 0.33 | 220 |

**Note: When ordering, please specify tolerance code. Tolerance: M=±20% , T=±30%**

- Operating temperature range－30℃～100℃(Including self - temperature rise)
- Rated current for Inductance drop 35% from its value with current
- Irms for a 40℃ temperature rise from 25℃ ambient.
- RDC test method: place testing device to the 2 solder ends of wounding and test the value.
- Measure Equipment：
  L：Agilent/ E4980 or HP4284A
  RDC：Chroma 16502
  Rated current：HP4284+42841A or WK3260B+WK3265B
  Irms：HP4284+42841A or WK3260B+WK3265B

## Electrical Characteristics

| Part Number | Inductance (μH) | Tolerance (±%) | Test Frequency | RDC (Ω)Max | Rated Current (A) | Marking |
|---|---|---|---|---|---|---|
| BPSC000404181R0□S1 | 1.0 | 30 | 100kHz,0.1V | 0.04 | 1.6 | 1R0 |
| BPSC000404181R5□S1 | 1.5 | 30 | 100kHz,0.1V | 0.052 | 1.55 | 1R5 |
| BPSC000404182R2□S1 | 2.2 | 30 | 100kHz,0.1V | 0.072 | 1.2 | 2R2 |
| BPSC000404183R3□S1 | 3.3 | 30 | 100kHz,0.1V | 0.085 | 1.1 | 3R3 |
| BPSC000404184R7□S1 | 4.7 | 20,30 | 100kHz,0.1V | 0.105 | 0.9 | 4R7 |
| BPSC000404185R6□S1 | 5.6 | 30 | 100kHz,0.1V | 0.135 | 0.8 | 5R6 |
| BPSC000404186R8□S1 | 6.8 | 20,30 | 100kHz,0.1V | 0.17 | 0.73 | 6R8 |
| BPSC000404188R2□S1 | 8.2 | 20,30 | 100kHz,0.1V | 0.21 | 0.55 | 8R2 |
| BPSC00040418100□S1 | 10 | 20,30 | 100kHz,0.1V | 0.21 | 0.55 | 100 |
| BPSC00040418150□S1 | 15 | 30 | 100kHz,0.1V | 0.295 | 0.45 | 150 |
| BPSC00040418220□S1 | 22 | 20,30 | 100kHz,0.1V | 0.43 | 0.4 | 220 |
| BPSC00040418330□S1 | 33 | 30 | 100kHz,0.1V | 0.675 | 0.32 | 330 |
| BPSC00040418101□S1 | 100 | 30 | 100kHz,0.1V | 2.75 | 0.13 | 101 |

**Note: When ordering, please specify tolerance code. Tolerance: M=±20% , T=±30%**

- Operating temperature range－30℃～100℃(Including self - temperature rise)
- Rated current : DC current that will cause L drop approximately 35% over its nominal value or DC current cause the temperature rising approximately 40℃,whichever is lower.
- RDC test method: place testing device to the 2 solder ends of wounding and test the value.
- Measure Equipment：
  L：Agilent/ E4980 or HP4284A
  RDC：Chroma 16502
  Rated current：HP4284+42841A or WK3260B+WK3265B

## Electrical Characteristics

| Part Number | Inductance (μH) | Tolerance (±%) | Test Frequency | RDC (Ω)Max | Rated Current (A) | Irms (A)Typ. | Marking |
|---|---|---|---|---|---|---|---|
| BPSC000404301R0□00 | 1.0 | 30 | 100 kHz,1 V | 0.045 | 2.8 | 2.5 | 1R0 |
| BPSC000404303R3□00 | 3.3 | 30 | 100 kHz,1 V | 0.0721 | 2 | 1.85 | 3R3 |
| BPSC000404304R7□00 | 4.7 | 30 | 100 kHz,1 V | 0.0883 | 1.65 | 1.62 | 4R7 |
| BPSC000404306R8□00 | 6.8 | 30 | 100 kHz,1 V | 0.119 | 1.24 | 1.32 | 6R8 |
| BPSC00040430100□00 | 10 | 30 | 100 kHz,1 V | 0.145 | 1.05 | 1.18 | 100 |
| BPSC00040430150□00 | 15 | 30 | 100 kHz,1 V | 0.213 | 0.9 | 1.02 | 150 |
| BPSC00040430220□00 | 22 | 30 | 100 kHz,1 V | 0.335 | 0.76 | 0.74 | 220 |
| BPSC00040430330□00 | 33 | 30 | 100 kHz,1 V | 0.481 | 0.58 | 0.63 | 330 |
| BPSC00040430470□00 | 47 | 20,30 | 100 kHz,1 V | 0.599 | 0.48 | 0.56 | 470 |

**Note: When ordering, please specify tolerance code. Tolerance: M=±20% , T=±30%**

- Operating temperature range－30℃～100℃(Including self - temperature rise)
- Rated current for Inductance drop 35% from its value with current
- Irms for a 40℃ temperature rise from 25℃ ambient.
- RDC test method: place testing device to the 2 solder ends of wounding and test the value.
- Measure Equipment：
  L：Agilent/ E4980 or HP4284A
  RDC：Chroma 16502
  Rated current：HP4284+42841A or WK3260B+WK3265B
  Irms：HP4284+42841A or WK3260B+WK3265B

## Electrical Characteristics

| Part Number | Inductance (μH) | Tolerance (±%) | Test Frequency | RDC (Ω)Max | Rated Current (A) | Irms (A)Typ. | Marking |
|---|---|---|---|---|---|---|---|
| BPSC00040430100□LD | 10 | 30 | 100 kHz,1 V | 0.095 | 0.5 | 1.52 | 100 |
| BPSC00040430120□LD | 12 | 30 | 100 kHz,1 V | 0.1 | 0.45 | 1.48 | 120 |
| BPSC00040430150□LD | 15 | 30 | 100 kHz,1 V | 0.115 | 0.4 | 1.44 | 150 |
| BPSC00040430180□LD | 18 | 30 | 100 kHz,1 V | 0.125 | 0.35 | 1.37 | 180 |
| BPSC00040430220□LD | 22 | 30 | 100 kHz,1 V | 0.145 | 0.33 | 1.28 | 220 |
| BPSC00040430270□LD | 27 | 30 | 100 kHz,1 V | 0.175 | 0.29 | 1.18 | 270 |
| BPSC00040430330□LD | 33 | 30 | 100 kHz,1 V | 0.215 | 0.28 | 1.15 | 330 |
| BPSC00040430390□LD | 39 | 30 | 100 kHz,1 V | 0.225 | 0.25 | 1 | 390 |
| BPSC00040430470□LD | 47 | 30 | 100 kHz,1 V | 0.305 | 0.23 | 0.81 | 470 |
| BPSC00040430560□LD | 56 | 30 | 100 kHz,1 V | 0.325 | 0.2 | 0.76 | 560 |
| BPSC00040430680□LD | 68 | 30 | 100 kHz,1 V | 0.47 | 0.185 | 0.6 | 680 |
| BPSC00040430820□LD | 82 | 30 | 100 kHz,1 V | 0.54 | 0.172 | 0.58 | 820 |
| BPSC00040430101□LD | 100 | 30 | 100 kHz,1 V | 0.61 | 0.16 | 0.52 | 101 |
| BPSC00040430121□LD | 120 | 30 | 100 kHz,1 V | 0.755 | 0.136 | 0.5 | 121 |
| BPSC00040430151□LD | 150 | 30 | 100 kHz,1 V | 0.88 | 0.124 | 0.48 | 151 |
| BPSC00040430181□LD | 180 | 30 | 100 kHz,1 V | 1.13 | 0.119 | 0.42 | 181 |
| BPSC00040430221□LD | 220 | 30 | 100 kHz,1 V | 1.27 | 0.116 | 0.36 | 221 |

**Note: When ordering, please specify tolerance code. Tolerance: M=±20% , T=±30%**

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- Irms for a 40℃ temperature rise from 25℃ ambient.
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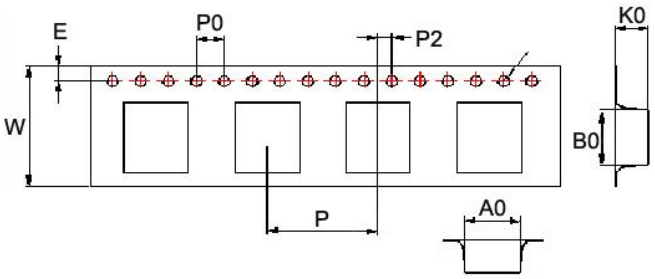
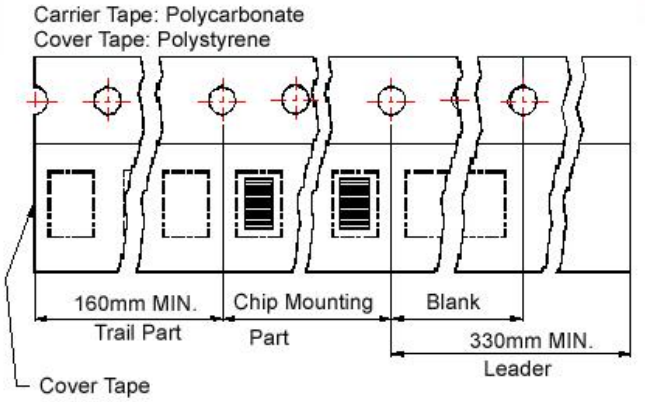
- Measure Equipment：
  L：Agilent/ E4980 or HP4284A
  RDC：Chroma 16502
  Rated current：HP4284+42841A or WK3260B+WK3265B
  Irms：HP4284+42841A or WK3260B+WK3265B

## Packaging Specifications

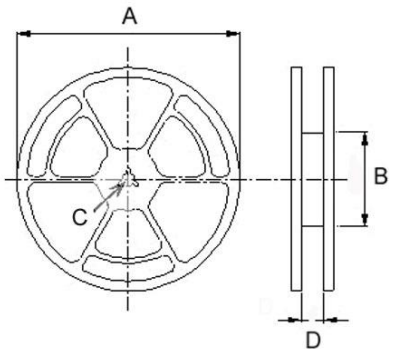
### Tape Dimensions




### Tape Material




### Reel Dimensions




**Dimensions in mm**

| TYPE | Tape Dimensions | | | | | | | | | Reel Dimensions | | | | Quantity |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | A0 | B0 | K0 | D | E | W | P | P0 | P2 | A | B | C | D | PCS / REEL |
| BPSC00030316 | 3.35 | 3.35 | 1.7 | 1.55 | 1.75 | 12 | 8 | 4 | 2 | 178 | 60 | 13 | 13.2 | 1000 |
| BPSC00030320 | 3.5 | 3.5 | 2.1 | 1.55 | 1.75 | 12 | 8 | 4 | 2 | 178 | 60 | 13 | 13.2 | 1000 |
| BPSC00040412 | 4.2 | 4.2 | 1.5 | 1.55 | 1.75 | 12 | 8 | 4 | 2 | 178 | 60 | 13 | 13.2 | 1000 |
| BPSC00040418 | 4.1 | 4.1 | 2.0 | 1.5 | 1.75 | 12 | 8 | 4 | 2 | 178 | 60 | 13 | 13.2 | 1000 |
| BPSC00040430 | 4.2 | 4.2 | 3.2 | 1.55 | 1.75 | 12 | 8 | 4 | 2 | 178 | 60 | 13 | 13.2 | 500 |

# BPSC Series

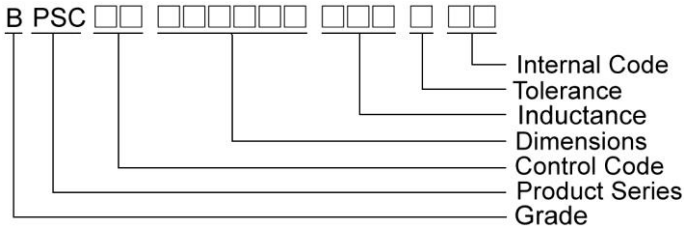
## Features

- RoHS, Halogen Free and REACH Compliance
- Magnetic shielded
- Various package size and wide inductance range

## Applications

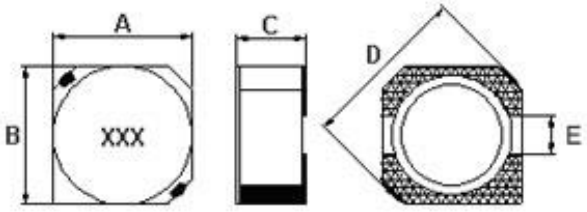
- AP Routers
- STBs
- LCD TVs and monitors
- Game consoles
- LED lightings
- DC/DC converters

## Product Identification

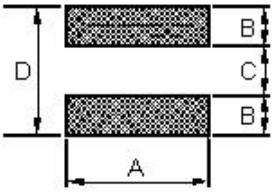



## Shape and Dimensions


BPSC00040418




## Recommended Pattern

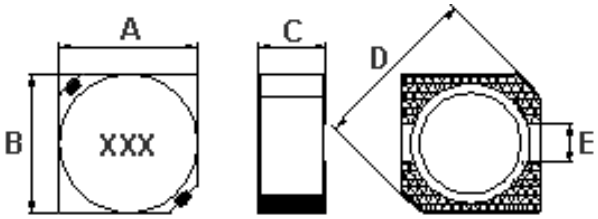



Dimensions in mm

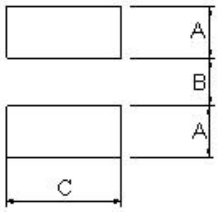
| TYPE | Shape and Dimensions | | | | | Recommended Pattern | | | |
|---|---|---|---|---|---|---|---|---|---|
| | A | B | C | D | E | A | B | C | D |
| BPSC00404018 | $4^{+0}$ | $4^{+0}$ | $1.8^{+0}$ | $5.2^{+0}$ | 1.0 | 4.6 | 1.6 | 1.4 | 4.6 |

## Shape and Dimensions


BPSC00050520~050540




## Recommended Pattern



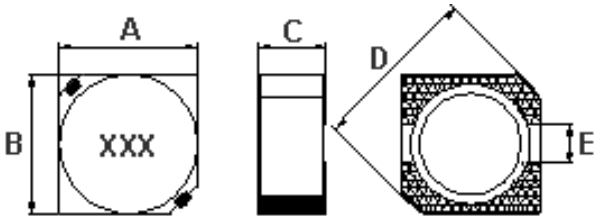

Dimension in mm

| TYPE | Shape and Dimensions | | | | | Recommended Pattern | | |
|---|---|---|---|---|---|---|---|---|
| | A | B | C | D | E | A | B | C |
| BPSC00050520 | 4.7±0.3 | 4.7±0.3 | $2.0^{+0}$ | $6.9^{+0}$ | 1.5 | 1.9 | 1.5 | 5.3 |
| BPSC00050530 | 4.7±0.3 | 4.7±0.3 | $3.0^{+0}$ | $6.9^{+0}$ | 1.5 | 1.9 | 1.5 | 5.3 |
| BPSC00050540 | 4.7±0.3 | 4.7±0.3 | $4^{+0}$ | $6.9^{+0}$ | 1.5 | 1.9 | 1.5 | 5.3 |

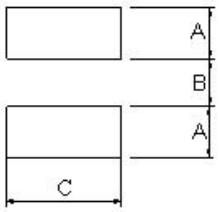
# SMD Shielded Power Inductors - BPSC Series

## Shape and Dimensions


BPSC00060620~070740




## Recommended Pattern




Dimension in mm

| TYPE | Shape and Dimensions | | | | | Recommended Pattern | | |
|---|---|---|---|---|---|---|---|---|
| | A | B | C | D | E | A | B | C |
| BPSC00060620 | 5.7±0.3 | 5.7±0.3 | $2.0^{+0}$ | $8.2^{+0}$ | 2.0 | 2.15 | 2.0 | 6.3 |
| BPSC00060630 | 5.7±0.3 | 5.7±0.3 | $3.0^{+0}$ | $8.2^{+0}$ | 2.0 | 2.15 | 2.0 | 6.3 |
| BPSC00070730 | 6.7±0.3 | 6.7±0.3 | $3.0^{+0}$ | $9.5^{+0}$ | 2.0 | 2.65 | 2.0 | 7.3 |
| BPSC00070740 | $7^{+0}$ | $7^{+0}$ | $4^{+0}$ | $9.5^{+0}$ | 2.0 | 2.65 | 2.0 | 7.3 |

## Electrical Characteristics

| Part Number | Inductance (μH) | Tolerance (±%) | Test Frequency | RDC (Ω)Max | Isat(A) Max(Typ.) | Marking |
|---|---|---|---|---|---|---|
| BPSC000404181R0□S0 | 1.0 | 30 | 100 kHz,0.1 V | 0.04 | 1.35(1.70) | 1R0 |
| BPSC000404181R5□S0 | 1.5 | 30 | 100 kHz,0.1 V | 0.052 | 1.25(1.60) | 1R5 |
| BPSC000404182R2□S0 | 2.2 | 30 | 100 kHz,0.1 V | 0.072 | 1.00(1.30) | 2R2 |
| BPSC000404183R3□S0 | 3.3 | 20,30 | 100 kHz,0.1 V | 0.085 | 0.88(1.10) | 3R3 |
| BPSC000404183R6□S0 | 3.6 | 30 | 100 kHz,0.1 V | 0.09 | 0.74(0.93) | 3R6 |
| BPSC000404184R7□S0 | 4.7 | 20,30 | 100 kHz,0.1 V | 0.105 | 0.72(0.90) | 4R7 |
| BPSC000404186R8□S0 | 6.8 | 20,30 | 100 kHz,0.1 V | 0.17 | 0.61(0.74) | 6R8 |
| BPSC00040418100□S0 | 10 | 20,30 | 100 kHz,0.1 V | 0.21 | 0.55(0.60) | 100 |
| BPSC00040418150□S0 | 15 | 20,30 | 100 kHz,0.1 V | 0.295 | 0.45(0.52) | 150 |
| BPSC00040418220□S0 | 22 | 20,30 | 100 kHz,0.1 V | 0.43 | 0.32(0.40) | 220 |
| BPSC00040418270□S0 | 27 | 30 | 100 kHz,0.1 V | 0.62 | 0.30(0.37) | 270 |
| BPSC00040418330□S0 | 33 | 30 | 100 kHz,0.1 V | 0.675 | 0.26(0.32) | 330 |
| BPSC00040418680□S0 | 68 | 30 | 100 kHz,0.1 V | 1.7 | 0.16(0.21) | 680 |

**Note: When ordering, please specify tolerance code. Tolerance: M=±20% , T=±30%**

- Operating temperature range－30℃～100℃(Including self - temperature rise)
- Isat for Inductance drop 35% from its value with current
- RDC test method: place testing device to the 2 solder ends of wounding and test the value.
- Measure Equipment：
  L：Agilent/ E4980 or HP4284A
  RDC：Chroma 16502
  Isat：HP4284+42841A or WK3260B+WK3265B

## Electrical Characteristics

| Part Number | Inductance (μH) | Tolerance (±%) | Test Frequency | RDC (Ω)Max | Isat(A) Max(Typ.) | Marking |
|---|---|---|---|---|---|---|
| BPSC000505201R0□S0 | 1 | 30 | 7.96 MHz,1 V | 0.045 | 1.72(2.50) | 1R0 |
| BPSC00050520R5□S0 | 1.5 | 30 | 7.96 MHz,1 V | 0.06 | 1.50(1.80) | 1R5 |
| BPSC000505201R8□S0 | 1.8 | 30 | 7.96 MHz,1 V | 0.07 | 1.35(1.70) | 1R8 |
| BPSC000505202R2□S0 | 2.2 | 20,30 | 7.96 MHz,1 V | 0.075 | 1.30(1.60) | 2R2 |
| BPSC000505202R7□S0 | 2.7 | 30 | 7.96 MHz,1 V | 0.105 | 1.20(1.50) | 2R7 |
| BPSC000505203R3□S0 | 3.3 | 20,30 | 7.96 MHz,1 V | 0.11 | 1.04(1.30) | 3R3 |
| BPSC000505203R9□S0 | 3.9 | 30 | 7.96 MHz,1 V | 0.155 | 0.88(1.20) | 3R9 |
| BPSC000505204R7□S0 | 4.7 | 30 | 7.96 MHz,1 V | 0.162 | 0.84(1.10) | 4R7 |
| BPSC000505205R6□S0 | 5.6 | 30 | 7.96 MHz,1 V | 0.17 | 0.80(1.00) | 5R6 |
| BPSC000505206R3□S0 | 6.3 | 30 | 7.96 MHz,1 V | 0.18 | 0.78(0.95) | 6R3 |
| BPSC000505206R8□S0 | 6.8 | 20,30 | 7.96 MHz,1 V | 0.2 | 0.76(0.85) | 6R8 |
| BPSC000505208R2□S0 | 8.2 | 30 | 7.96 MHz,1 V | 0.245 | 0.68(0.80) | 8R2 |
| BPSC00050520100□S0 | 10 | 20,30 | 100 kHz,1 V | 0.28 | 0.61(0.75) | 100 |
| BPSC00050520120□S0 | 12 | 30 | 100 kHz,1 V | 0.32 | 0.56(0.70) | 120 |
| BPSC00050520150□S0 | 15 | 30 | 100 kHz,1 V | 0.36 | 0.50(0.65) | 150 |
| BPSC00050520180□S0 | 18 | 30 | 100 kHz,1 V | 0.4 | 0.48(0.60) | 180 |
| BPSC00050520220□S0 | 22 | 20,30 | 100 kHz,1 V | 0.48 | 0.41(0.55) | 220 |
| BPSC00050520270□S0 | 27 | 30 | 100 kHz,1 V | 0.57 | 0.35(0.50) | 270 |
| BPSC00050520330□S0 | 33 | 30 | 100 kHz,1 V | 0.694 | 0.32(0.45) | 330 |
| BPSC00050520390□S0 | 39 | 30 | 100 kHz,1 V | 0.8 | 0.30(0.40) | 390 |
| BPSC00050520470□S0 | 47 | 30 | 100 kHz,1 V | 0.95 | 0.28(0.38) | 470 |
| BPSC00050520560□S0 | 56 | 30 | 100 kHz,1 V | 1.08 | 0.26(0.35) | 560 |
| BPSC00050520680□S0 | 68 | 30 | 100 kHz,1 V | 1.3 | 0.24(0.34) | 680 |
| BPSC00050520101□S0 | 100 | 20,30 | 100 kHz,1 V | 2 | 0.20(0.30) | 101 |

**Note: When ordering, please specify tolerance code. Tolerance: M=±20% , T=±30%**

- Operating temperature range－30℃～100℃(Including self - temperature rise)
- Isat for Inductance drop 35% from its value with current
- RDC test method: place testing device to the 2 solder ends of wounding and test the value.
- Measure Equipment：
  L：Agilent/ E4980 or HP4284A (under 1MHz), HP4285A (over 1MHz)
  RDC：Chroma 16502
  Isat：HP4284+42841A or WK3260B+WK3265B

## Electrical Characteristics

| Part Number | Inductance (μH) | Tolerance (±%) | Test Frequency | RDC (Ω)Max | Isat(A) Max(Typ.) | Marking |
|---|---|---|---|---|---|---|
| BPSC000505301R2□S0 | 1.2 | 30 | 100 kHz,1 V | 0.0236 | 2.56(4.10) | 1R2 |
| BPSC000505301R8□S0 | 1.8 | 30 | 100 kHz,1 V | 0.035 | 2.20(3.20) | 1R8 |
| BPSC000505302R0□S0 | 2.0 | 30 | 100 kHz,1 V | 0.030 | 2.10(3.00) | 2R0 |
| BPSC000505302R2□S0 | 2.2 | 20,30 | 100 kHz,1 V | 0.0313 | 2.04(2.90) | 2R2 |
| BPSC000505302R7□S0 | 2.7 | 30 | 100 kHz,1 V | 0.0433 | 1.60(2.80) | 2R7 |
| BPSC000505303R3□S0 | 3.3 | 30 | 100 kHz,1 V | 0.0492 | 1.57(2.30) | 3R3 |
| BPSC000505303R9□S0 | 3.9 | 30 | 100 kHz,1 V | 0.0648 | 1.44(2.10) | 3R9 |
| BPSC000505304R7□S0 | 4.7 | 20,30 | 100 kHz,1 V | 0.072 | 1.32(2.00) | 4R7 |
| BPSC000505305R6□S0 | 5.6 | 30 | 100 kHz,1 V | 0.1009 | 1.17(1.70) | 5R6 |
| BPSC000505306R8□S0 | 6.8 | 20,30 | 100 kHz,1 V | 0.1089 | 1.12(1.60) | 6R8 |
| BPSC000505308R2□S0 | 8.2 | 30 | 100 kHz,1 V | 0.1175 | 1.04(1.50) | 8R2 |
| BPSC00050530100□S0 | 10 | 30 | 100 kHz,1 V | 0.1283 | 1.00(1.30) | 100 |
| BPSC00050530120□S0 | 12 | 20,30 | 100 kHz,1 V | 0.1316 | 0.84(1.10) | 120 |
| BPSC00050530150□S0 | 15 | 30 | 100 kHz,1 V | 0.149 | 0.76(1.00) | 150 |
| BPSC00050530180□S0 | 18 | 30 | 100 kHz,1 V | 0.166 | 0.72(0.99) | 180 |
| BPSC00050530220□S0 | 22 | 20,30 | 100 kHz,1 V | 0.235 | 0.70(0.93) | 220 |
| BPSC00050530270□S0 | 27 | 30 | 100 kHz,1 V | 0.261 | 0.58(0.83) | 270 |
| BPSC00050530330□S0 | 33 | 20,30 | 100 kHz,1 V | 0.3313 | 0.56(0.64) | 330 |
| BPSC00050530390□S0 | 39 | 20,30 | 100 kHz,1 V | 0.3837 | 0.50(0.70) | 390 |
| BPSC00050530470□S0 | 47 | 20,30 | 100 kHz,1 V | 0.587 | 0.48(0.61) | 470 |
| BPSC00050530560□S0 | 56 | 30 | 100 kHz,1 V | 0.6245 | 0.41(0.54) | 560 |
| BPSC00050530680□S0 | 68 | 30 | 100 kHz,1 V | 0.699 | 0.35(0.49) | 680 |
| BPSC00050530820□S0 | 82 | 30 | 100 kHz,1 V | 0.9148 | 0.32(0.49) | 820 |
| BPSC00050530101□S0 | 100 | 20,30 | 100 kHz,1 V | 1.02 | 0.29(0.45) | 101 |
| BPSC00050530121□S0 | 120 | 30 | 100 kHz,1 V | 1.27 | 0.27(0.40) | 121 |
| BPSC00050530151□S0 | 150 | 30 | 100 kHz,1 V | 1.35 | 0.24(0.34) | 151 |
| BPSC00050530181□S0 | 180 | 30 | 100 kHz,1 V | 1.54 | 0.22(0.32) | 181 |
| BPSC00050530221□S0 | 220 | 30 | 100 kHz,1 V | 2 | 0.20(0.29) | 221 |
| BPSC00050530331□S0 | 330 | 20,30 | 100 kHz,1 V | 3.4 | 0.19(0.24) | 331 |
| BPSC00050530391□S0 | 390 | 20,30 | 100 kHz,1 V | 3.56 | 0.18(0.22) | 391 |
| BPSC00050530681□S0 | 680 | 20,30 | 100 kHz,1 V | 5.2 | 0.10(0.17) | 681 |

**Note: When ordering, please specify tolerance code. Tolerance: M=±20% , T=±30%**

- Operating temperature range－30℃～100℃(Including self - temperature rise)
- Isat for Inductance drop 35% from its value with current
- RDC test method: place testing device to the 2 solder ends of wounding and test the value.
- Measure Equipment：
  L：Agilent/ E4980 or HP4284A (under 1MHz), HP4285A (over 1MHz)
  RDC：Chroma 16502
  Isat：HP4284+42841A or WK3260B+WK3265B

## Electrical Characteristics

| Part Number | Inductance (μH) | Tolerance (±%) | Test Frequency | RDC (Ω)Max | Isat(A) Max(Typ.) | Irms (A)Typ. | Marking |
|---|---|---|---|---|---|---|---|
| BPSC000505402R2□S0 | 2.2 | 30 | 100 kHz,1V | 0.033 | 3.5(4.6) | 4.3 | 2R2 |
| BPSC000505403R3□S0 | 3.3 | 30 | 100 kHz,1V | 0.039 | 2.7(3.4) | 3.6 | 3R3 |
| BPSC000505404R7□S0 | 4.7 | 20,30 | 100 kHz,1V | 0.053 | 2.4(3.0) | 3 | 4R7 |
| BPSC000505406R8□S0 | 6.8 | 20,30 | 100 kHz,1V | 0.06 | 2.0(2.6) | 2.8 | 6R8 |
| BPSC00050540100□S0 | 10 | 20,30 | 100 kHz,1V | 0.15 | 1.5(2.0) | 1.6 | 100 |
| BPSC00050540150□S0 | 15 | 20,30 | 100 kHz,1V | 0.21 | 1.2(1.6) | 1.35 | 150 |
| BPSC00050540220□S0 | 22 | 20,30 | 100 kHz,1V | 0.27 | 1.0(1.4) | 1 | 220 |

**Note: When ordering, please specify tolerance code. Tolerance: M=±20% , T=±30%**

- Operating temperature range－30℃～100℃(Including self - temperature rise)
- Isat for Inductance drop 35% from its value with current
- Irms for a 40℃ temperature rise from 25℃ ambient.
- RDC test method: place testing device to the 2 solder ends of wounding and test the value.
- Measure Equipment：
  L：Agilent/ E4980 or HP4284A (under 1MHz)
  RDC：Chroma 16502
  Isat：HP4284+42841A or WK3260B+WK3265B
  Irms：HP4284+42841A or WK3260B+WK3265B

## Electrical Characteristics

| Part Number | Inductance (μH) | Tolerance (±%) | Test Frequency | RDC (Ω)Max | Isat(A) Max(Typ.) | Marking |
|---|---|---|---|---|---|---|
| BPSC000606201R0□S0 | 1.0 | 30 | 10 kHz,1 V | 0.038 | 1.00(3.50) | 1R0 |
| BPSC000606201R5□S0 | 1.5 | 30 | 10 kHz,1 V | 0.038 | 2.50(3.00) | 1R5 |
| BPSC000606202R0□S0 | 2.0 | 30 | 10 kHz,1 V | 0.045 | 2.10(2.60) | 2R0 |
| BPSC000606202R2□S0 | 2.2 | 30 | 10 kHz,1 V | 0.048 | 2.00(2.50) | 2R2 |
| BPSC000606203R3□S0 | 3.3 | 30 | 10 kHz,1 V | 0.056 | 1.70(2.00) | 3R3 |
| BPSC000606204R1□S0 | 4.1 | 30 | 10 kHz,1 V | 0.057 | 1.55(1.90) | 4R1 |
| BPSC000606204R7□S0 | 4.7 | 20,30 | 10 kHz,1 V | 0.076 | 1.35(1.70) | 4R7 |
| BPSC000606205R4□S0 | 5.4 | 30 | 10 kHz,1 V | 0.076 | 1.20(1.50) | 5R4 |
| BPSC000606206R2□S0 | 6.2 | 30 | 10 kHz,1 V | 0.096 | 1.10(1.40) | 6R2 |
| BPSC000606206R8□S0 | 6.8 | 30 | 10 kHz,1 V | 0.1 | 1.00(1.30) | 6R8 |
| BPSC000606208R9□S0 | 8.9 | 30 | 10 kHz,1 V | 0.116 | 0.95(1.25) | 8R9 |
| BPSC00060620100□S0 | 10 | 20,30 | 10 kHz,1 V | 0.124 | 0.90(1.20) | 100 |
| BPSC00060620120□S0 | 12 | 30 | 10 kHz,1 V | 0.153 | 0.90(1.00) | 120 |
| BPSC00060620150□S0 | 15 | 20,30 | 10 kHz,1 V | 0.196 | 0.80(0.91) | 150 |
| BPSC00060620180□S0 | 18 | 30 | 10 kHz,1 V | 0.21 | 0.75(0.90) | 180 |
| BPSC00060620220□S0 | 22 | 20,30 | 10 kHz,1 V | 0.29 | 0.65(0.80) | 220 |
| BPSC00060620270□S0 | 27 | 30 | 10 kHz,1 V | 0.33 | 0.60(0.70) | 270 |
| BPSC00060620330□S0 | 33 | 20,30 | 10 kHz,1 V | 0.386 | 0.55(0.65) | 330 |
| BPSC00060620390□S0 | 39 | 30 | 10 KHz,1 V | 0.52 | 0.48(0.60) | 390 |
| BPSC00060620470□S0 | 47 | 20,30 | 10 kHz,1 V | 0.595 | 0.44(0.51) | 470 |
| BPSC00060620560□S0 | 56 | 30 | 10 kHz,1 V | 0.665 | 0.40(0.50) | 560 |
| BPSC00060620680□S0 | 68 | 30 | 10 kHz,1 V | 0.84 | 0.33(0.43) | 680 |
| BPSC00060620820□S0 | 82 | 30 | 10 kHz,1 V | 0.978 | 0.30(0.41) | 820 |
| BPSC00060620101□S0 | 100 | 20,30 | 10 kHz,1 V | 1.2 | 0.25(0.36) | 101 |

**Note: When ordering, please specify tolerance code. Tolerance: M=±20% , T=±30%**

- Operating temperature range－30℃～100℃(Including self - temperature rise)
- Isat for Inductance drop 35% from its value with current
- RDC test method: place testing device to the 2 solder ends of wounding and test the value.
- Measure Equipment：
  L：Agilent/ E4980 or HP4284A
  RDC：Chroma 16502
  Isat：HP4284+42841A or WK3260B+WK3265B

## Electrical Characteristics

| Part Number | Inductance (μH) | Tolerance (±%) | Test Frequency | RDC (Ω)Max | Isat(A) Max(Typ.) | Marking |
|---|---|---|---|---|---|---|
| BPSC000606301R0□S0 | 1.0 | 30 | 10 kHz,1 V | 0.015 | 3.50(4.20) | 1R0 |
| BPSC000606301R5□S0 | 1.5 | 30 | 10 kHz,1 V | 0.015 | 2.80(3.70) | 1R5 |
| BPSC000606302R2□S0 | 2.2 | 30 | 10 kHz,1 V | 0.018 | 2.40(3.10) | 2R2 |
| BPSC000606302R5□S0 | 2.5 | 30 | 10 kHz,1 V | 0.022 | 2.30(2.70) | 2R5 |
| BPSC000606302R6□S0 | 2.6 | 30 | 10 kHz,1 V | 0.022 | 2.20(2.60) | 2R6 |
| BPSC000606302R7□S0 | 2.7 | 30 | 10 kHz,1 V | 0.024 | 2.20(2.60) | 2R7 |
| BPSC000606303R0□S0 | 3.0 | 30 | 10 kHz,1 V | 0.024 | 2.20(2.50) | 3R0 |
| BPSC000606303R3□S0 | 3.3 | 30 | 10 kHz,1 V | 0.027 | 2.10(2.50) | 3R3 |
| BPSC000606304R2□S0 | 4.2 | 30 | 10 kHz,1 V | 0.031 | 2.00(2.20) | 4R2 |
| BPSC000606304R3□S0 | 4.3 | 30 | 10 kHz,1 V | 0.041 | 1.80(2.10) | 4R3 |
| BPSC000606304R7□S0 | 4.7 | 20,30 | 10 kHz,1 V | 0.038 | 1.60(2.00) | 4R7 |
| BPSC000606305R0□S0 | 5.0 | 30 | 10 kHz,1 V | 0.038 | 1.50(1.90) | 5R0 |
| BPSC000606305R3□S0 | 5.3 | 20,30 | 10 kHz,1 V | 0.038 | 1.50(1.90) | 5R3 |
| BPSC000606306R2□S0 | 6.2 | 20,30 | 10 kHz,1 V | 0.045 | 1.20(1.80) | 6R2 |
| BPSC000606306R8□S0 | 6.8 | 20,30 | 10 kHz,1 V | 0.05 | 1.20(1.60) | 6R8 |
| BPSC000606308R2□S0 | 8.2 | 20,30 | 10 kHz,1 V | 0.053 | 1.00(1.50) | 8R2 |
| BPSC00060630100□S0 | 10 | 20,30 | 10 kHz,1 V | 0.065 | 0.95(1.40) | 100 |
| BPSC00060630120□S0 | 12 | 20,30 | 10 kHz,1 V | 0.076 | 0.90(1.30) | 120 |
| BPSC00060630150□S0 | 15 | 20,30 | 10 kHz,1 V | 0.103 | 0.85(1.10) | 150 |
| BPSC00060630180□S0 | 18 | 30 | 10 kHz,1 V | 0.11 | 0.80(1.00) | 180 |
| BPSC00060630220□S0 | 22 | 20,30 | 10 kHz,1 V | 0.122 | 0.75(0.92) | 220 |
| BPSC00060630270□S0 | 27 | 30 | 10 kHz,1 V | 0.175 | 0.65(0.82) | 270 |
| BPSC00060630330□S0 | 33 | 30 | 10 kHz,1 V | 0.189 | 0.60(0.75) | 330 |
| BPSC00060630390□S0 | 39 | 30 | 10 kHz,1 V | 0.212 | 0.55(0.70) | 390 |
| BPSC00060630470□S0 | 47 | 20,30 | 10 kHz,1 V | 0.25 | 0.50(0.62) | 470 |
| BPSC00060630560□S0 | 56 | 30 | 10 kHz,1 V | 0.305 | 0.48(0.59) | 560 |
| BPSC00060630680□S0 | 68 | 30 | 10 kHz,1 V | 0.355 | 0.42(0.52) | 680 |
| BPSC00060630820□S0 | 82 | 30 | 10 kHz,1 V | 0.463 | 0.39(0.46) | 820 |

**Note: When ordering, please specify tolerance code. Tolerance: M=±20% , T=±30%**

- Operating temperature range－30℃～100℃(Including self - temperature rise)
- Isat for Inductance drop 35% from its value with current
- RDC test method: place testing device to the 2 solder ends of wounding and test the value.
- Measure Equipment：
  L：Agilent/ E4980 or HP4284A
  RDC：Chroma 16502
  Isat：HP4284+42841A or WK3260B+WK3265B

## Electrical Characteristics

| Part Number | Inductance (μH) | Tolerance (±%) | Test Frequency | RDC (Ω)Max | Isat(A) Max(Typ.) | Marking |
|---|---|---|---|---|---|---|
| BPSC00060630101□S0 | 100 | 20,30 | 10 kHz,1 V | 0.52 | 0.35(0.42) | 101 |
| BPSC00060630181□S0 | 180 | 30 | 10 kHz,1 V | 1.05 | 0.21(0.31) | 181 |
| BPSC00060630221□S0 | 220 | 30 | 10 kHz,1 V | 1.2 | 0.20(0.30) | 221 |
| BPSC00060630331□S0 | 330 | 20,30 | 10 kHz,1 V | 1.7 | 0.15(0.24) | 331 |
| BPSC00060630391□S0 | 390 | 30 | 10 kHz,1 V | 1.8 | 0.13(0.22) | 391 |
| BPSC00060630471□S0 | 470 | 20,30 | 10 kHz,1 V | 2.5 | 0.11(0.21) | 471 |
| BPSC00060630561□S0 | 560 | 20,30 | 10 kHz,1 V | 3.2 | 0.10(0.17) | 561 |

**Note: When ordering, please specify tolerance code. Tolerance: M=±20% , T=±30% , N=+40% -20%**

- Operating temperature range－30℃～100℃(Including self - temperature rise)
- Isat for Inductance drop 35% from its value with current
- RDC test method: place testing device to the 2 solder ends of wounding and test the value.
- Measure Equipment：
  L：Agilent/ E4980 or HP4284A
  RDC：Chroma 16502
  Isat：HP4284+42841A or WK3260B+WK3265B

## Electrical Characteristics

| Part Number | Inductance (μH) | Tolerance (±%) | Test Frequency | RDC (Ω)Max | Isat(A) Max(Typ.) | Marking |
|---|---|---|---|---|---|---|
| BPSC000707301R0□S0 | 1.0 | 30 | 10 kHz,1 V | 0.024 | 3.50(5.30) | 1R0 |
| BPSC000707301R5□S0 | 1.5 | 30 | 10 kHz,1 V | 0.0195 | 3.40(4.50) | 1R5 |
| BPSC000707302R2□S0 | 2.2 | 20,30 | 10 kHz,1 V | 0.035 | 3.00(3.40) | 2R2 |
| BPSC000707303R0□S0 | 3 | 30 | 10 kHz,1 V | 0.024 | 2.60(3.20) | 3R0 |
| BPSC000707303R3□S0 | 3.3 | 30 | 10 kHz,1 V | 0.025 | 2.50(3.10) | 3R3 |
| BPSC000707303R9□S0 | 3.9 | 30 | 10 kHz,1 V | 0.027 | 2.30(2.90) | 3R9 |
| BPSC000707304R7□S0 | 4.7 | 20,30 | 10 kHz,1 V | 0.031 | 1.92(2.40) | 4R7 |
| BPSC000707305R0□S0 | 5.0 | 30 | 10 kHz,1 V | 0.031 | 1.74(2.40) | 5R0 |
| BPSC000707306R0□S0 | 6.0 | 30 | 10 kHz,1 V | 0.035 | 1.70(2.25) | 6R0 |
| BPSC000707306R2□S0 | 6.2 | 20,30 | 10 kHz,1 V | 0.051 | 1.40(2.20) | 6R2 |
| BPSC000707306R8□S0 | 6.8 | 20,30 | 10 kHz,1 V | 0.05 | 1.30(2.15) | 6R8 |
| BPSC000707307R3□S0 | 7.3 | 30 | 10 kHz,1 V | 0.054 | 1.25(2.10) | 7R3 |
| BPSC000707308R6□S0 | 8.6 | 30 | 10 kHz,1 V | 0.058 | 1.20(1.85) | 8R6 |
| BPSC00070730100□S0 | 10 | 20,30 | 10 kHz,1 V | 0.065 | 1.15(1.70) | 100 |
| BPSC00070730120□S0 | 12 | 20,30 | 10 kHz,1 V | 0.07 | 1.14(1.50) | 120 |
| BPSC00070730150□S0 | 15 | 20,30 | 10 kHz,1 V | 0.084 | 1.12(1.40) | 150 |
| BPSC00070730180□S0 | 18 | 30 | 10 kHz,1 V | 0.095 | 1.02(1.32) | 180 |
| BPSC00070730220□S0 | 22 | 30 | 10 kHz,1 V | 0.128 | 0.87(1.20) | 220 |
| BPSC00070730270□S0 | 27 | 30 | 10 kHz,1 V | 0.142 | 0.82(1.05) | 270 |
| BPSC00070730330□S0 | 33 | 30 | 10 kHz,1 V | 0.165 | 0.80(0.97) | 330 |
| BPSC00070730390□S0 | 39 | 30 | 10 kHz,1 V | 0.21 | 0.79(0.90) | 390 |
| BPSC00070730470□S0 | 47 | 20,30 | 10 kHz,1 V | 0.238 | 0.70(0.80) | 470 |
| BPSC00070730560□S0 | 56 | 30 | 10 kHz,1 V | 0.277 | 0.60(0.73) | 560 |
| BPSC00070730680□S0 | 68 | 30 | 10 kHz,1 V | 0.304 | 0.55(0.65) | 680 |
| BPSC00070730820□S0 | 82 | 30 | 10 kHz,1 V | 0.39 | 0.48(0.60) | 820 |
| BPSC00070730101□S0 | 100 | 30 | 10 kHz,1 V | 0.535 | 0.43(0.54) | 101 |
| BPSC00070730121□S0 | 120 | 20,30 | 10 kHz,1 V | 0.6 | 0.36(0.45) | 121 |
| BPSC00070730221□S0 | 220 | 20,30 | 10 kHz,1 V | 1.3 | 0.27(0.34) | 221 |

**Note: When ordering, please specify tolerance code. Tolerance: M=±20% , T=±30%**

- Operating temperature range－30℃～100℃(Including self - temperature rise)
- Isat for Inductance drop 35% from its value with current
- RDC test method: place testing device to the 2 solder ends of wounding and test the value.
- Measure Equipment：
  L：Agilent/ E4980 or HP4284A
  RDC：Chroma 16502
  Isat：HP4284+42841A or WK3260B+WK3265B

## Electrical Characteristics

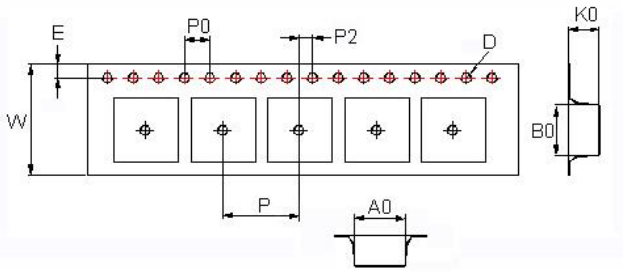
| Part Number | Inductance (μH) | Tolerance (±%) | Test Frequency | RDC (Ω)Max | Isat(A) Max(Typ.) | Marking |
|---|---|---|---|---|---|---|
| BPSC000707402R2□S0 | 2.2 | 30 | 10 kHz,0.1 V | 0.018 | 3.80(4.70) | 2R2 |
| BPSC000707402R7□S0 | 2.7 | 30 | 10 kHz,0.1 V | 0.02 | 3.20(4.00) | 2R7 |
| BPSC000707403R3□S0 | 3.3 | 20,30 | 10 kHz,0.1 V | 0.023 | 3.00(3.80) | 3R3 |
| BPSC000707404R7□S0 | 4.7 | 20,30 | 10 kHz,0.1 V | 0.025 | 2.70(3.40) | 4R7 |
| BPSC000707405R0□S0 | 5 | 20,30 | 10 kHz,0.1 V | 0.026 | 2.50(3.10) | 5R0 |
| BPSC000707405R6□S0 | 5.6 | 30 | 10 kHz,0.1 V | 0.027 | 2.30(3.00) | 5R6 |
| BPSC000707406R2□S0 | 6.2 | 20,30 | 10 kHz,0.1 V | 0.027 | 1.80(2.80) | 6R2 |
| BPSC000707406R8□S0 | 6.8 | 30 | 10 kHz,0.1 V | 0.032 | 1.70(2.70) | 6R8 |
| BPSC000707407R4□S0 | 7.4 | 30 | 10 kHz,0.1 V | 0.032 | 1.70(2.50) | 7R4 |
| BPSC000707408R7□S0 | 8.7 | 30 | 10 kHz,0.1 V | 0.034 | 1.70(2.40) | 8R7 |
| BPSC00070740100□S0 | 10 | 20,30 | 10 kHz,0.1 V | 0.041 | 1.60(2.20) | 100 |
| BPSC00070740120□S0 | 12 | 30 | 10 kHz,0.1 V | 0.053 | 1.50(1.90) | 120 |
| BPSC00070740150□S0 | 15 | 20,30 | 10 kHz,0.1 V | 0.057 | 1.40(1.80) | 150 |
| BPSC00070740180□S0 | 18 | 30 | 10 kHz,0.1 V | 0.092 | 1.25(1.60) | 180 |
| BPSC00070740220□S0 | 22 | 20,30 | 10 kHz,0.1 V | 0.096 | 1.10(1.50) | 220 |
| BPSC00070740270□S0 | 27 | 30 | 10 kHz,0.1 V | 0.109 | 0.90(1.20) | 270 |
| BPSC00070740330□S0 | 33 | 20,30 | 10 kHz,0.1 V | 0.124 | 0.85(1.10) | 330 |
| BPSC00070740390□S0 | 39 | 20,30 | 10 kHz,0.1 V | 0.138 | 0.80(1.10) | 390 |
| BPSC00070740470□S0 | 47 | 20,30 | 10 kHz,0.1 V | 0.15 | 0.70(1.00) | 470 |
| BPSC00070740560□S0 | 56 | 30 | 10 kHz,0.1 V | 0.202 | 0.65(0.90) | 560 |
| BPSC00070740680□S0 | 68 | 20,30 | 10 kHz,0.1 V | 0.234 | 0.60(0.80) | 680 |
| BPSC00070740820□S0 | 82 | 30 | 10 kHz,0.1 V | 0.324 | 0.55(0.70) | 820 |
| BPSC00070740101□S0 | 100 | 20,30 | 10 kHz,0.1 V | 0.358 | 0.50(0.65) | 101 |
| BPSC00070740561□S0 | 560 | 30 | 10 kHz,0.1 V | 1.8 | 0.20(0.25) | 561 |

**Note: When ordering, please specify tolerance code. Tolerance: M=±20% , T=±30%**

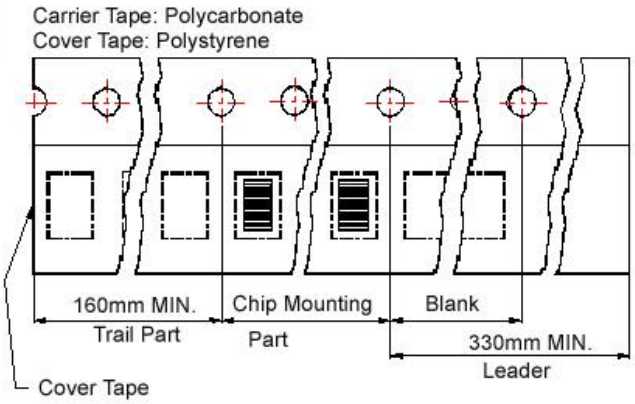
- Operating temperature range－30℃～100℃(Including self - temperature rise)
- Isat for Inductance drop 35% from its value with current
- RDC test method: place testing device to the 2 solder ends of wounding and test the value.
- Measure Equipment：
  L：Agilent/ E4980 or HP4284A
  RDC：Chroma 16502
  Isat：HP4284+42841A or WK3260B+WK3265B

## Packaging Specifications

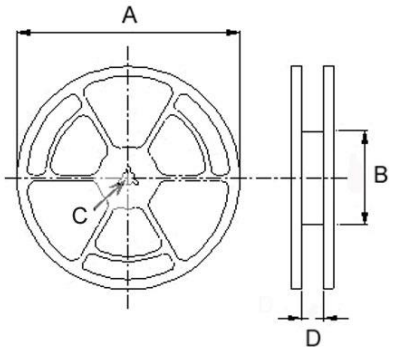
### Tape Dimensions




### Tape Material




### Reel Dimensions




**Dimensions in mm**

| TYPE | Tape Dimensions | | | | | | | | | Reel Dimensions | | | | Quantity |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | A0 | B0 | K0 | D | E | W | P | P0 | P2 | A | B | C | D | PCS / REEL |
| BPSC00404018 | 4.1 | 4.1 | 2.0 | 1.5 | 1.75 | 12 | 8 | 4 | 2 | 178 | 60 | 13 | 13.2 | 1000 |
| BPSC00050520 | 5.3 | 5.3 | 2.4 | 1.5 | 1.75 | 12 | 8 | 4 | 2 | 330 | 100 | 13 | 13.4 | 2000 |
| BPSC00050530 | 5.3 | 5.3 | 3.4 | 1.5 | 1.75 | 12 | 8 | 4 | 2 | 330 | 100 | 13 | 13.4 | 2000 |
| BPSC00050540 | 5.35 | 5.35 | 4.1 | 1.55 | 1.75 | 12 | 8 | 4 | 2 | 330 | 100 | 13 | 13.4 | 1000 |
| BPSC00060620 | 6.2 | 6.2 | 2.2 | 1.55 | 1.75 | 16 | 12 | 4 | 2 | 330 | 100 | 13 | 13.4 | 1500 |
| BPSC00060630 | 6.2 | 6.2 | 3.1 | 1.55 | 1.75 | 16 | 12 | 4 | 2 | 330 | 100 | 13 | 17.4 | 1500 |
| BPSC00070730 | 7.25 | 7.25 | 3.35 | 1.55 | 1.75 | 16 | 12 | 4 | 2 | 330 | 100 | 13 | 17.4 | 1500 |
| BPSC00070740 | 7.1 | 7.1 | 4.1 | 1.55 | 1.75 | 16 | 12 | 4 | 2 | 330 | 100 | 13 | 17.4 | 1000 |

# BPSC Series

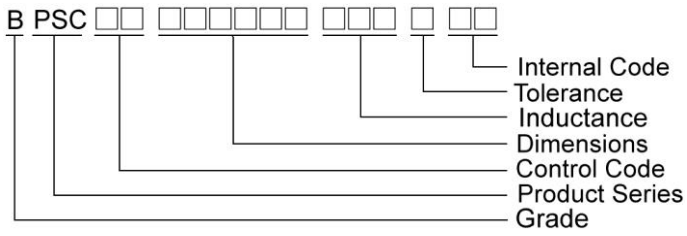
## Features

- RoHS, Halogen Free and REACH Compliance
- Magnetic shielded
- Various package size and wide inductance range

## Applications

- AP Routers
- STBs
- LCD TVs and monitors
- Game consoles
- LED lightings
- DC/DC converters

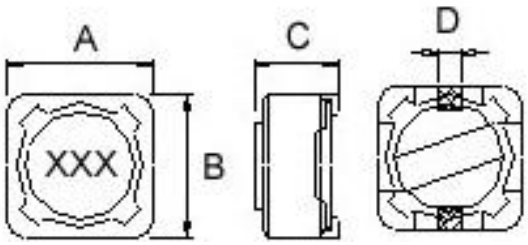
## Product Identification

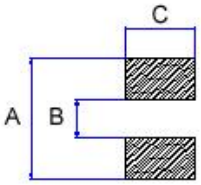



## Shape and Dimensions

## Recommended Pattern

BPSC00070734/070745

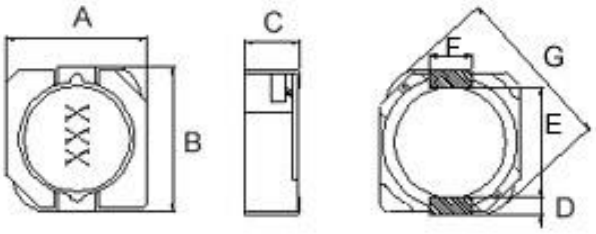

Dimension in mm

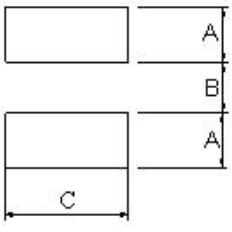
| TYPE | Shape and Dimensions | | | | Recommended Pattern | | |
|---|---|---|---|---|---|---|---|
| | A | B | C | D | A | B | C |
| BPSC00070734 | 7.3±0.2 | 7.3±0.2 | $3.4^{+0}$ | 1.8 | 8.4 | 4.4 | 2.2 |
| BPSC00070745 | 7.3±0.2 | 7.3±0.2 | $4.5^{+0}$ | 1.8 | 8.4 | 4.4 | 2.2 |

## Shape and Dimensions

## Recommended Pattern

BPSC00101131/101140/101151

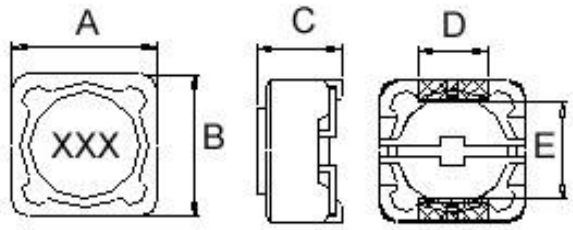

Dimensions in mm

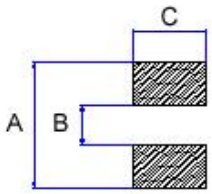
| TYPE | A | B | C | D | E | F | G | A | B | C |
|---|---|---|---|---|---|---|---|---|---|---|
| BPSC00101131 | $10.3^{+0}$ | $10.5^{+0}$ | $3.1^{+0}$ | 1.2 | 7.7 | 3.0 | $13.5^{+0}$ | 1.6 | 7.3 | 3.2 |
| BPSC00101140 | $10.3^{+0}$ | $10.5^{+0}$ | $4^{+0}$ | 1.2 | 7.7 | 3.0 | $13.5^{+0}$ | 1.6 | 7.3 | 3.2 |
| BPSC00101151 | $10.3^{+0}$ | $10.5^{+0}$ | $5.1^{+0}$ | 1.2 | 7.7 | 3.0 | $13.5^{+0}$ | 1.6 | 7.3 | 3.2 |

## Shape and Dimensions

## Recommended Pattern

BPSC00131345/131360/131380/131310


Dimensions in mm

| TYPE | Shape and Dimensions | | | | | Recommended Pattern | | |
|---|---|---|---|---|---|---|---|---|
| | A | B | C | D | E | A | B | C |
| BPSC00131345 | $12.5^{+0}$ | $12.5^{+0}$ | $4.5^{+0}$ | 5 | 7.6 | 13 | 7 | 5.4 |
| BPSC00131360 | $12.5^{+0}$ | $12.5^{+0}$ | $6^{+0}$ | 5 | 7.6 | 13 | 7 | 5.4 |
| BPSC00131380 | $12.5^{+0}$ | $12.5^{+0}$ | $8^{+0}$ | 5 | 7.6 | 13 | 7 | 5.4 |
| BPSC00131310 | 12±0.5 | 12±0.5 | 10 Max. | 5.0±0.2 | 7.6±0.3 | 12.8 | 7 | 5.4 |

## Electrical Characteristics

| Part Number | Inductance (μH) | Tolerance (±%) | Test Frequency | RDC (Ω) Max | Isat (A) Max | Marking |
|---|---|---|---|---|---|---|
| BPSC000707341R5□00 | 1.5 | 20 | 1 kHz,1 V | 0.03 | 4 | 1R5 |
| BPSC000707342R2□00 | 2.2 | 20 | 1 kHz,1 V | 0.03 | 4 | 2R2 |
| BPSC000707343R3□00 | 3.3 | 20 | 1 kHz,1 V | 0.04 | 3.7 | 3R3 |
| BPSC000707346R8□00 | 6.8 | 20 | 1 kHz,1 V | 0.06 | 2 | 6R8 |
| BPSC00070734100□00 | 10 | 20 | 1 kHz,1 V | 0.072 | 1.68 | 100 |
| BPSC00070734120□00 | 12 | 20 | 1 kHz,1 V | 0.098 | 1.52 | 120 |
| BPSC00070734150□00 | 15 | 20 | 1 kHz,1 V | 0.13 | 1.33 | 150 |
| BPSC00070734180□00 | 18 | 20 | 1 kHz,1 V | 0.14 | 1.2 | 180 |
| BPSC00070734220□00 | 22 | 20 | 1 kHz,1 V | 0.19 | 1.07 | 220 |
| BPSC00070734270□00 | 27 | 20 | 1 kHz,1 V | 0.21 | 0.96 | 270 |
| BPSC00070734330□00 | 33 | 20 | 1 kHz,1 V | 0.24 | 0.91 | 330 |
| BPSC00070734390□00 | 39 | 20 | 1 kHz,1 V | 0.32 | 0.77 | 390 |
| BPSC00070734470□00 | 47 | 20 | 1 kHz,1 V | 0.36 | 0.76 | 470 |
| BPSC00070734560□00 | 56 | 20 | 1 kHz,1 V | 0.47 | 0.68 | 560 |
| BPSC00070734680□00 | 68 | 20 | 1 kHz,1 V | 0.52 | 0.61 | 680 |
| BPSC00070734820□00 | 82 | 20 | 1 kHz,1 V | 0.69 | 0.57 | 820 |
| BPSC00070734101□00 | 100 | 20 | 1 kHz,1 V | 0.79 | 0.5 | 101 |
| BPSC00070734121□00 | 120 | 20 | 1 kHz,1 V | 0.89 | 0.49 | 121 |
| BPSC00070734151□00 | 150 | 20 | 1 kHz,1 V | 1.27 | 0.43 | 151 |
| BPSC00070734181□00 | 180 | 20 | 1 kHz,1 V | 1.45 | 0.39 | 181 |
| BPSC00070734221□00 | 220 | 20 | 1 kHz,1 V | 1.65 | 0.35 | 221 |
| BPSC00070734271□00 | 270 | 20 | 1 kHz,1 V | 2.31 | 0.32 | 271 |
| BPSC00070734331□00 | 330 | 20 | 1 kHz,1 V | 2.62 | 0.28 | 331 |
| BPSC00070734391□00 | 390 | 20 | 1 kHz,1 V | 2.94 | 0.26 | 391 |
| BPSC00070734471□00 | 470 | 20 | 1 kHz,1 V | 4.18 | 0.24 | 471 |
| BPSC00070734561□00 | 560 | 20 | 1 kHz,1 V | 4.67 | 0.22 | 561 |
| BPSC00070734681□00 | 680 | 20 | 1 kHz,1 V | 5.73 | 0.19 | 681 |
| BPSC00070734821□00 | 820 | 20 | 1 kHz,1 V | 6.54 | 0.18 | 821 |
| BPSC00070734102□00 | 1000 | 20 | 1 kHz,1 V | 9.44 | 0.16 | 102 |

**Note: When ordering, please specify tolerance code. Tolerance: M=±20%**

- Operating temperature range－40℃～125℃(Including self - temperature rise)
- Isat for Inductance drop 35% from its value with current
- Measure Equipment：
  L：Agilent/ E4980 or HP4284A (under 1MHz), HP4285A (over 1MHz)
  RDC：Chroma 16502
  Isat：HP4284+42841A or WK3260B+WK3265B

## Electrical Characteristics

| Part Number | Inductance (μH) | Tolerance (±%) | Test Frequency | RDC (Ω) Max | Isat (A) Max | Marking |
|---|---|---|---|---|---|---|
| BPSC000707451R5□00 | 1.5 | 20 | 1 kHz,1 V | 0.02 | 5 | 1R5 |
| BPSC000707451R8□00 | 1.8 | 20 | 1 kHz,1 V | 0.025 | 4 | 1R8 |
| BPSC000707452R2□00 | 2.2 | 20,30 | 1 kHz,1 V | 0.025 | 3.5 | 2R2 |
| BPSC000707452R7□00 | 2.7 | 20,30 | 1 kHz,1 V | 0.03 | 3.5 | 2R7 |
| BPSC000707453R3□00 | 3.3 | 20,30 | 1 kHz,1 V | 0.035 | 3.5 | 3R3 |
| BPSC000707453R6□00 | 3.6 | 20,30 | 1 kHz,1 V | 0.035 | 3.2 | 3R6 |
| BPSC000707454R7□00 | 4.7 | 20,30 | 1 kHz,1 V | 0.035 | 3 | 4R7 |
| BPSC000707456R8□00 | 6.8 | 20 | 1 kHz,1 V | 0.045 | 2.5 | 6R8 |
| BPSC00070745100□00 | 10 | 20 | 1 kHz,1 V | 0.049 | 1.84 | 100 |
| BPSC00070745120□00 | 12 | 20 | 1 kHz,1 V | 0.058 | 1.71 | 120 |
| BPSC00070745150□00 | 15 | 20 | 1 kHz,1 V | 0.081 | 1.47 | 150 |
| BPSC00070745180□00 | 18 | 20 | 1 kHz,1 V | 0.091 | 1.31 | 180 |
| BPSC00070745220□00 | 22 | 20 | 1 kHz,1 V | 0.11 | 1.23 | 220 |
| BPSC00070745270□00 | 27 | 20 | 1 kHz,1 V | 0.15 | 1.12 | 270 |
| BPSC00070745330□00 | 33 | 20 | 1 kHz,1 V | 0.17 | 0.96 | 330 |
| BPSC00070745390□00 | 39 | 20 | 1 kHz,1 V | 0.23 | 0.91 | 390 |
| BPSC00070745470□00 | 47 | 20 | 1 kHz,1 V | 0.26 | 0.88 | 470 |
| BPSC00070745560□00 | 56 | 20 | 1 kHz,1 V | 0.35 | 0.75 | 560 |
| BPSC00070745680□00 | 68 | 20 | 1 kHz,1 V | 0.38 | 0.69 | 680 |
| BPSC00070745820□00 | 82 | 20 | 1 kHz,1 V | 0.43 | 0.61 | 820 |
| BPSC00070745101□00 | 100 | 20 | 1 kHz,1 V | 0.61 | 0.6 | 101 |
| BPSC00070745121□00 | 120 | 20 | 1 kHz,1 V | 0.66 | 0.52 | 121 |
| BPSC00070745151□00 | 150 | 20 | 1 kHz,1 V | 0.88 | 0.46 | 151 |
| BPSC00070745181□00 | 180 | 20 | 1 kHz,1 V | 0.98 | 0.42 | 181 |
| BPSC00070745221□00 | 220 | 10,20 | 1 kHz,1 V | 1.17 | 0.36 | 221 |
| BPSC00070745271□00 | 270 | 10,20 | 1 kHz,1 V | 1.64 | 0.34 | 271 |
| BPSC00070745331□00 | 330 | 10,20 | 1 kHz,1 V | 1.86 | 0.32 | 331 |
| BPSC00070745391□00 | 390 | 10,20 | 1 kHz,1 V | 2.85 | 0.29 | 391 |
| BPSC00070745471□00 | 470 | 10,20 | 1 kHz,1 V | 3.01 | 0.26 | 471 |
| BPSC00070745561□00 | 560 | 10,20 | 1 kHz,1 V | 3.62 | 0.23 | 561 |
| BPSC00070745681□00 | 680 | 10,20 | 1 kHz,1 V | 4.63 | 0.22 | 681 |
| BPSC00070745821□00 | 820 | 10,20 | 1 kHz,1 V | 5.2 | 0.2 | 821 |
| BPSC00070745102□00 | 1000 | 10,20 | 1 kHz,1 V | 6 | 0.18 | 102 |

**Note: When ordering, please specify tolerance code. Tolerance: K=±10% , M=±20% , T=±30%**

- Operating temperature range－40℃～125℃(Including self - temperature rise)
- Isat for Inductance drop 35% from its value with current
- Measure Equipment：
  L：Agilent/ E4980 or HP4284A (under 1MHz), HP4285A (over 1MHz)
  RDC：Chroma 16502
  Isat：HP4284+42841A or WK3260B+WK3265B

## Electrical Characteristics

| Part Number | Inductance (μH) | Tolerance (±%) | Test Frequency | RDC (Ω) Max | Isat (A) Max | Irms (A)Typ. | Marking |
|---|---|---|---|---|---|---|---|
| BPSC001011314R7□00 | 4.7 | 30 | 100 kHz,1 V | 0.03 | 4.65 | 4 | 4R7 |
| BPSC001011316R8□00 | 6.8 | 30 | 100 kHz,1 V | 0.035 | 3.84 | 3.6 | 6R8 |
| BPSC00101131100□00 | 10 | 20,30 | 100 kHz,1 V | 0.059 | 3.18 | 2.8 | 100 |
| BPSC00101131150□00 | 15 | 20,30 | 100 kHz,1 V | 0.091 | 2.6 | 2.05 | 150 |
| BPSC00101131330□00 | 33 | 20,30 | 100 kHz,1 V | 0.202 | 1.74 | 1.35 | 330 |
| BPSC00101131470□00 | 47 | 20,30 | 100 kHz,1 V | 0.299 | 1.43 | 1.2 | 470 |
| BPSC00101131560□00 | 56 | 20,30 | 100 kHz,1 V | 0.325 | 0.9 | 1.15 | 560 |

**Note: When ordering, please specify tolerance code. Tolerance: M=±20% , T=±30%**

- Operating temperature range－40℃～125℃(Including self - temperature rise)
- Isat for Inductance drop 35% from its value with current
- Irms for a 40℃ temperature rise from 25℃ ambient.
- Measure Equipment：
  L：Agilent/ E4980 or HP4284A (under 1MHz), HP4285A (over 1MHz)
  RDC：Chroma 16502
  Isat：HP4284+42841A or WK3260B+WK3265B
  Irms：HP4284+42841A or WK3260B+WK3265B

## Electrical Characteristics

| Part Number | Inductance (μH) | Tolerance (±%) | Test Frequency | RDC (Ω) Max | Isat(A) Max(Typ.) | Irms (A)Typ. | Marking |
|---|---|---|---|---|---|---|---|
| BPSC001011401R5□00 | 1.5 | 30,+40-20 | 100 kHz,1 V | 0.0088 | 8.5(10.5) | 6.5 | 1R5 |
| BPSC001011402R2□00 | 2.2 | 30 | 100 kHz,1 V | 0.012 | 8.0(10.5) | 6.1 | 2R2 |
| BPSC001011402R5□00 | 2.5 | 30 | 100 kHz,1 V | 0.012 | 7.5(9.5) | 6.1 | 2R5 |
| BPSC001011403R3□00 | 3.3 | 30 | 100 kHz,1 V | 0.015 | 7.0(8.7) | 5.5 | 3R3 |
| BPSC001011403R8□00 | 3.8 | 30 | 100 kHz,1 V | 0.015 | 6.8(8.5) | 5.5 | 3R8 |
| BPSC001011404R7□00 | 4.7 | 20,30 | 100 kHz,1 V | 0.02 | 5.8(7.3) | 5.4 | 4R7 |
| BPSC001011405R2□00 | 5.2 | 20,30 | 100 kHz,1 V | 0.024 | 5.8(7.3) | 5.2 | 5R2 |
| BPSC001011405R6□00 | 5.6 | 20,30 | 100 kHz,1 V | 0.027 | 5.0(6.5) | 4.5 | 5R6 |
| BPSC001011406R8□00 | 6.8 | 20,30 | 100 kHz,1 V | 0.031 | 5.0(6.5) | 4.4 | 6R8 |
| BPSC001011407R0□00 | 7 | 20,30 | 100 kHz,1 V | 0.031 | 4.8(5.9) | 4.4 | 7R0 |
| BPSC001011408R2□00 | 8.2 | 20,30 | 100 kHz,1 V | 0.036 | 4.5(5.8) | 3.8 | 8R2 |
| BPSC00101140100□00 | 10 | 20,30 | 100 kHz,1 V | 0.04 | 4.0(5.0) | 3.6 | 100 |
| BPSC00101140120□00 | 12 | 20,30 | 100 kHz,1 V | 0.046 | 3.7(4.6) | 3.4 | 120 |
| BPSC00101140150□00 | 15 | 20,30 | 100 kHz,1 V | 0.055 | 3.4(4.3) | 2.8 | 150 |
| BPSC00101140180□00 | 18 | 20,30 | 100 kHz,1 V | 0.075 | 2.9(3.6) | 2.5 | 180 |
| BPSC00101140220□00 | 22 | 20,30 | 100 kHz,1 V | 0.08 | 2.6(3.3) | 2.4 | 220 |
| BPSC00101140270□00 | 27 | 20,30 | 100 kHz,1 V | 0.096 | 2.4(3.0) | 2.2 | 270 |
| BPSC00101140330□00 | 33 | 20,30 | 100 kHz,1 V | 0.098 | 2.3(2.9) | 2.1 | 330 |
| BPSC00101140390□00 | 39 | 20,30 | 100 kHz,1 V | 0.12 | 2.1(2.7) | 2 | 390 |
| BPSC00101140470□00 | 47 | 20,30 | 100 kHz,1 V | 0.144 | 1.8(2.5) | 1.8 | 470 |
| BPSC00101140560□00 | 56 | 20,30 | 100 kHz,1 V | 0.175 | 1.6(2.1) | 1.6 | 560 |
| BPSC00101140680□00 | 68 | 20,30 | 100 kHz,1 V | 0.204 | 1.4(1.9) | 1.45 | 680 |
| BPSC00101140820□00 | 82 | 20,30 | 100 kHz,1 V | 0.25 | 1.3(1.7) | 1.4 | 820 |
| BPSC00101140101□00 | 100 | 20,30 | 100 kHz,1 V | 0.304 | 1.0(1.6) | 1.25 | 101 |
| BPSC00101140151□00 | 150 | 20,30 | 100 kHz,1 V | 0.506 | 0.96(1.3) | 0.85 | 151 |
| BPSC00101140221□00 | 220 | 20,30 | 100 kHz,1 V | 0.69 | 0.8(1.0) | 0.73 | 221 |
| BPSC00101140331□00 | 330 | 20,30 | 100 kHz,1 V | 1.09 | 0.68(0.86) | 0.52 | 331 |
| BPSC00101140471□00 | 470 | 20,30 | 100 kHz,1 V | 1.6 | 0.6(0.75) | 0.46 | 471 |
| BPSC00101140561□00 | 560 | 20,30 | 100 kHz,1 V | 1.68 | 0.5(0.68) | 0.45 | 561 |

**Note: When ordering, please specify tolerance code. Tolerance: M=±20% , T=±30% , N=+40% -20%**

- Operating temperature range－40℃～125℃(Including self - temperature rise)
- Isat for Inductance drop 35% from its value with current
- Irms for a 40℃ temperature rise from 25℃ ambient.
- Measure Equipment：
  L：Agilent/ E4980 or HP4284A (under 1MHz), HP4285A (over 1MHz)
  RDC：Chroma 16502
  Isat：HP4284+42841A or WK3260B+WK3265B
  Irms：HP4284+42841A or WK3260B+WK3265B

## Electrical Characteristics

| Part Number | Inductance (μH) | Tolerance (±%) | Test Frequency | RDC (Ω) Max | Isat(A) Max(Typ.) | Irms (A)Typ. | Marking |
|---|---|---|---|---|---|---|---|
| BPSC00101151R80□00 | 0.8 | 30 | 100 kHz,1 V | 0.0062 | 10.8(13.5) | 7.8 | R80 |
| BPSC001011511R5□00 | 1.5 | 30 | 100 kHz,1 V | 0.0081 | 10.3(12.9) | 7 | 1R5 |
| BPSC001011512R2□00 | 2.2 | 30 | 100 kHz,1 V | 0.011 | 9.2(11) | 6.3 | 2R2 |
| BPSC001011513R3□00 | 3.3 | 30 | 100 kHz,1 V | 0.012 | 7.2(9.0) | 6.1 | 3R3 |
| BPSC001011514R7□00 | 4.7 | 20,30 | 100 kHz,1 V | 0.014 | 5.6(7.8) | 5 | 4R7 |
| BPSC001011516R8□00 | 6.8 | 20,30 | 100 kHz,1 V | 0.024 | 5.1(6.4) | 4.7 | 6R8 |
| BPSC001011518R2□00 | 8.2 | 20,30 | 100 kHz,1 V | 0.027 | 4.7(5.9) | 4.4 | 8R2 |
| BPSC00101151100□00 | 10 | 20,30 | 100 kHz,1 V | 0.028 | 4.4(5.6) | 4.2 | 100 |
| BPSC00101151120□00 | 12 | 20,30 | 100 kHz,1 V | 0.036 | 3.4(5.8) | 3.6 | 120 |
| BPSC00101151150□00 | 15 | 20,30 | 100 kHz,1 V | 0.041 | 3.2(4.5) | 3.4 | 150 |
| BPSC00101151180□00 | 18 | 20,30 | 100 kHz,1 V | 0.046 | 3.0(3.8) | 3.1 | 180 |
| BPSC00101151220□00 | 22 | 20,30 | 100 kHz,1 V | 0.061 | 2.8(3.6) | 2.9 | 220 |
| BPSC00101151270□00 | 27 | 20,30 | 100 kHz,1 V | 0.069 | 2.1(3.2) | 2.6 | 270 |
| BPSC00101151330□00 | 33 | 20,30 | 100 kHz,1 V | 0.084 | 2.0(2.9) | 2.5 | 330 |
| BPSC00101151390□00 | 39 | 20,30 | 100 kHz,1 V | 0.106 | 1.9(2.6) | 2.25 | 390 |
| BPSC00101151470□00 | 47 | 20,30 | 100 kHz,1 V | 0.13 | 1.7(2.3) | 2 | 470 |
| BPSC00101151560□00 | 56 | 20,30 | 100 kHz,1 V | 0.149 | 1.6(2.2) | 1.9 | 560 |
| BPSC00101151680□00 | 68 | 20,30 | 100 kHz,1 V | 0.201 | 1.5(2.0) | 1.6 | 680 |
| BPSC00101151820□00 | 82 | 20,30 | 100 kHz,1 V | 0.227 | 1.3(1.8) | 1.45 | 820 |
| BPSC00101151101□00 | 100 | 20,30 | 100 kHz,1 V | 0.253 | 1.2(1.7) | 1.35 | 101 |
| BPSC00101151121□00 | 120 | 20,30 | 100 kHz,1 V | 0.303 | 1.1(1.5) | 1.18 | 121 |
| BPSC00101151151□00 | 150 | 20,30 | 100 kHz,1 V | 0.42 | 1.0(1.3) | 1 | 151 |
| BPSC00101151181□00 | 180 | 20,30 | 100 kHz,1 V | 0.45 | 0.9(1.2) | 0.9 | 181 |
| BPSC00101151221□00 | 220 | 20,30 | 100 kHz,1 V | 0.54 | 0.8(1.1) | 0.85 | 221 |
| BPSC00101151271□00 | 270 | 20,30 | 100 kHz,1 V | 0.672 | 0.75(0.99) | 0.8 | 271 |
| BPSC00101151331□00 | 330 | 20,30 | 100 kHz,1 V | 0.812 | 0.74(0.92) | 0.73 | 331 |
| BPSC00101151391□00 | 390 | 20,30 | 100 kHz,1 V | 0.953 | 0.62(0.83) | 0.7 | 391 |
| BPSC00101151471□00 | 470 | 20,30 | 100 kHz,1 V | 1.29 | 0.6(0.77) | 0.54 | 471 |
| BPSC00101151561□00 | 560 | 20,30 | 100 kHz,1 V | 1.43 | 0.47(0.71) | 0.52 | 561 |
| BPSC00101151681□00 | 680 | 20,30 | 100 kHz,1 V | 1.6 | 0.46(0.65) | 0.51 | 681 |
| BPSC00101151821□00 | 820 | 20,30 | 100 kHz,1 V | 1.77 | 0.42(0.57) | 0.48 | 821 |
| BPSC00101151102□00 | 1000 | 20,30 | 100 kHz,1 V | 2.2 | 0.40(0.54) | 0.4 | 102 |

**Note: When ordering, please specify tolerance code. Tolerance: M=±20% , T=±30%**

- Operating temperature range－40℃～125℃(Including self - temperature rise)
- Isat for Inductance drop 35% from its value with current
- Irms for a 40℃ temperature rise from 25℃ ambient.
- Measure Equipment：
  L：Agilent/ E4980 or HP4284A (under 1MHz), HP4285A (over 1MHz)
  RDC：Chroma 16502
  Isat：HP4284+42841A or WK3260B+WK3265B
  Irms：HP4284+42841A or WK3260B+WK3265B

## Electrical Characteristics

| Part Number | Inductance (μH) | Tolerance (±%) | Test Frequency | RDC (Ω) Max | Isat(A) Max(Typ.) | Marking |
|---|---|---|---|---|---|---|
| BPSC001313453R3□00 | 3.3 | 30 | 100 kHz,1 V | 0.015 | 8.8(11.1) | 3R3 |
| BPSC001313453R9□00 | 3.9 | 30 | 100 kHz,1 V | 0.016 | 8.0(10.1) | 3R9 |
| BPSC001313454R7□00 | 4.7 | 20,30 | 100 kHz,1 V | 0.018 | 7.9(9.9) | 4R7 |
| BPSC001313456R8□00 | 6.8 | 20,30 | 100 kHz,1 V | 0.023 | 6.5(8.3) | 6R8 |
| BPSC00131345100□00 | 10 | 20,30 | 100 kHz,1 V | 0.035 | 5.2(6.6) | 100 |
| BPSC00131345120□00 | 12 | 20,30 | 100 kHz,1 V | 0.038 | 4.8(6.2) | 120 |
| BPSC00131345150□00 | 15 | 20,30 | 100 kHz,1 V | 0.05 | 4.1(5.4) | 150 |
| BPSC00131345180□00 | 18 | 20,30 | 100 kHz,1 V | 0.057 | 4.0(5.1) | 180 |
| BPSC00131345220□00 | 22 | 20,30 | 100 kHz,1 V | 0.066 | 3.5(4.4) | 220 |
| BPSC00131345270□00 | 27 | 20,30 | 100 kHz,1 V | 0.08 | 3.1(3.9) | 270 |
| BPSC00131345330□00 | 33 | 20,30 | 100 kHz,1 V | 0.097 | 2.7(3.5) | 330 |
| BPSC00131345390□00 | 39 | 20,30 | 100 kHz,1 V | 0.132 | 2.1(3.2) | 390 |
| BPSC00131345470□00 | 47 | 20,30 | 100 kHz,1 V | 0.15 | 1.9(2.9) | 470 |
| BPSC00131345560□00 | 56 | 20,30 | 100 kHz,1 V | 0.19 | 1.8(2.6) | 560 |
| BPSC00131345680□00 | 68 | 20,30 | 100 kHz,1 V | 0.22 | 1.5(2.5) | 680 |
| BPSC00131345820□00 | 82 | 20,30 | 100 kHz,1 V | 0.26 | 1.3(2.3) | 820 |
| BPSC00131345101□00 | 100 | 20,30 | 100 kHz,1 V | 0.308 | 1.2(2.0) | 101 |
| BPSC00131345121□00 | 120 | 20,30 | 100 kHz,1 V | 0.38 | 1.1(1.8) | 121 |
| BPSC00131345151□00 | 150 | 20,30 | 100 kHz,1 V | 0.53 | 0.95(1.6) | 151 |
| BPSC00131345181□00 | 180 | 20,30 | 100 kHz,1 V | 0.62 | 0.85(1.4) | 181 |
| BPSC00131345221□00 | 220 | 20,30 | 100 kHz,1 V | 0.7 | 0.8(1.3) | 221 |
| BPSC00131345271□00 | 270 | 20,30 | 100 kHz,1 V | 0.876 | 0.6(1.1) | 271 |
| BPSC00131345331□00 | 330 | 20,30 | 100 kHz,1 V | 0.99 | 0.5(1.0) | 331 |

**Note: When ordering, please specify tolerance code. Tolerance: M=±20% , T=±30%**

- Operating temperature range－40℃～125℃(Including self - temperature rise)
- Isat for Inductance drop 35% from its value with current
- Measure Equipment：
  L：Agilent/ E4980 or HP4284A (under 1MHz), HP4285A (over 1MHz)
  RDC：Chroma 16502
  Isat：HP4284+42841A or WK3260B+WK3265B

## Electrical Characteristics

| Part Number | Inductance (μH) | Tolerance (±%) | Test Frequency | RDC (Ω) Max | Isat(A) Max(Typ.) | Irms (A)Typ. | Marking |
|---|---|---|---|---|---|---|---|
| BPSC001313603R3□00 | 3.3 | 30 | 1 kHz,1 V | 0.015 | 8.0(11) | 6.5 | 3R3 |
| BPSC001313604R7□00 | 4.7 | 20,30 | 1 kHz,1 V | 0.018 | 7.6(9.2) | 5.7 | 4R7 |
| BPSC001313606R4□00 | 6.4 | 20,30 | 1 kHz,1 V | 0.018 | 6.4(8.1) | 5.7 | 6R4 |
| BPSC001313608R2□00 | 8.2 | 20,30 | 1 kHz,1 V | 0.02 | 5.8(7.4) | 5 | 8R2 |
| BPSC00131360100□00 | 10 | 20,30 | 1 kHz,1 V | 0.025 | 5.3(6.8) | 4 | 100 |
| BPSC00131360120□00 | 12 | 20,30 | 1 kHz,1 V | 0.027 | 5.3(6.8) | 3.5 | 120 |
| BPSC00131360150□00 | 15 | 20,30 | 1 kHz,1 V | 0.03 | 4.0(5.2) | 3.3 | 150 |
| BPSC00131360180□00 | 18 | 20,30 | 1 kHz,1 V | 0.034 | 3.8(4.9) | 3 | 180 |
| BPSC00131360220□00 | 22 | 20,30 | 1 kHz,1 V | 0.036 | 3.6(4.8) | 2.8 | 220 |
| BPSC00131360270□00 | 27 | 20,30 | 1 kHz,1 V | 0.051 | 3.2(4.1) | 2.3 | 270 |
| BPSC00131360330□00 | 33 | 20,30 | 1 kHz,1 V | 0.057 | 2.9(3.7) | 2.1 | 330 |
| BPSC00131360390□00 | 39 | 20,30 | 1 kHz,1 V | 0.068 | 2.7(3.5) | 2 | 390 |
| BPSC00131360470□00 | 47 | 20,30 | 1 kHz,1 V | 0.084 | 2.4(3.1) | 1.9 | 470 |
| BPSC00131360560□00 | 56 | 20,30 | 1 kHz,1 V | 0.1 | 2.1(2.7) | 1.7 | 560 |
| BPSC00131360680□00 | 68 | 20,30 | 1 kHz,1 V | 0.12 | 2.0(2.6) | 1.5 | 680 |
| BPSC00131360820□00 | 82 | 20,30 | 1 kHz,1 V | 0.14 | 1.8(2.3) | 1.4 | 820 |
| BPSC00131360101□00 | 100 | 20,30 | 1 kHz,1 V | 0.16 | 1.6(2.1) | 1.3 | 101 |
| BPSC00131360121□00 | 120 | 20,30 | 1 kHz,1 V | 0.18 | 1.5(1.9) | 1.05 | 121 |
| BPSC00131360151□00 | 150 | 20,30 | 1 kHz,1 V | 0.23 | 1.3(1.7) | 1 | 151 |
| BPSC00131360181□00 | 180 | 20,30 | 1 kHz,1 V | 0.29 | 1.2(1.6) | 0.9 | 181 |
| BPSC00131360221□00 | 220 | 20,30 | 1 kHz,1 V | 0.32 | 1.0(1.4) | 0.85 | 221 |
| BPSC00131360271□00 | 270 | 20,30 | 1 kHz,1 V | 0.38 | 0.90(1.2) | 0.83 | 271 |
| BPSC00131360331□00 | 330 | 20,30 | 1 kHz,1 V | 0.48 | 0.75(1.1) | 0.73 | 331 |
| BPSC00131360391□00 | 390 | 20,30 | 1 kHz,1 V | 0.6 | 0.70(1.0) | 0.67 | 391 |
| BPSC00131360471□00 | 470 | 20,30 | 1 kHz,1 V | 0.7 | 0.65(0.99) | 0.66 | 471 |
| BPSC00131360561□00 | 560 | 20,30 | 1 kHz,1 V | 0.86 | 0.60(0.91) | 0.54 | 561 |
| BPSC00131360681□00 | 680 | 20,30 | 1 kHz,1 V | 1.1 | 0.55(0.82) | 0.52 | 681 |
| BPSC00131360821□00 | 820 | 20,30 | 1 kHz,1 V | 1.34 | 0.50(0.71) | 0.43 | 821 |
| BPSC00131360102□00 | 1000 | 20,30 | 1 kHz,1 V | 1.53 | 0.45(0.64) | 0.3 | 102 |

**Note: When ordering, please specify tolerance code. Tolerance: M=±20% , T=±30%**

- Operating temperature range－40℃～125℃(Including self - temperature rise)
- Isat for Inductance drop 35% from its value with current
- Irms for a 40℃ temperature rise from 25℃ ambient
- Measure Equipment：
  L：Agilent/ E4980 or HP4284A (under 1MHz), HP4285A (over 1MHz)
  RDC：Chroma 16502
  Isat & Irms：HP4284+42841A or WK3260B+WK3265B

## Electrical Characteristics

| Part Number | Inductance (μH) | Tolerance (±%) | Test Frequency | RDC (Ω) Max | Isat(A) Max(Typ.) | Marking |
|---|---|---|---|---|---|---|
| BPSC001313801R5□00 | 1.5 | 30 | 100 kHz,1 V | 0.0074 | 21.6(28.0) | 1R5 |
| BPSC001313802R2□00 | 2.2 | 30,+40-20 | 100 kHz,1 V | 0.0089 | 17.6(24.0) | 2R2 |
| BPSC001313802R4□00 | 2.4 | 30,+40-20 | 100 kHz,1 V | 0.0089 | 17.6(24.0) | 2R4 |
| BPSC001313803R3□00 | 3.3 | 30,+40-20 | 100 kHz,1 V | 0.0099 | 14.6(19.4) | 3R3 |
| BPSC001313803R5□00 | 3.5 | 30,+40-20 | 100 kHz,1 V | 0.0123 | 13.8(17.4) | 3R5 |
| BPSC001313804R7□00 | 4.7 | 20,30 | 100 kHz,1 V | 0.0158 | 12.3(15.4) | 4R7 |
| BPSC001313806R1□00 | 6.1 | 20,30,+40-20 | 100 kHz,1 V | 0.0176 | 10.9(13.8) | 6R1 |
| BPSC001313806R8□00 | 6.8 | 20,30 | 100 kHz,1 V | 0.018 | 10.8(13.7) | 6R8 |
| BPSC001313807R6□00 | 7.6 | 20,30 | 100 kHz,1 V | 0.02 | 10.0(12.6) | 7R6 |
| BPSC00131380100□00 | 10 | 20,30 | 1 kHz,1 V | 0.022 | 8.9(11.2) | 100 |
| BPSC00131380120□00 | 12 | 20,30 | 1 kHz,1 V | 0.03 | 7.4(9.4) | 120 |
| BPSC00131380150□00 | 15 | 20,30 | 1 kHz,1 V | 0.034 | 7.1(9.0) | 150 |
| BPSC00131380180□00 | 18 | 20,30 | 1 kHz,1 V | 0.0392 | 6.5(8.2) | 180 |
| BPSC00131380220□00 | 22 | 20,30 | 1 kHz,1 V | 0.048 | 5.8(7.5) | 220 |
| BPSC00131380270□00 | 27 | 20,30 | 1 kHz,1 V | 0.052 | 5.3(6.7) | 270 |
| BPSC00131380330□00 | 33 | 20,30 | 1 kHz,1 V | 0.0648 | 4.8(6.1) | 330 |
| BPSC00131380390□00 | 39 | 20,30 | 1 kHz,1 V | 0.065 | 3.9(5.6) | 390 |
| BPSC00131380470□00 | 47 | 20,30 | 1 kHz,1 V | 0.1 | 3.6(5.2) | 470 |
| BPSC00131380560□00 | 56 | 20,30 | 1 kHz,1 V | 0.11 | 3.4(4.8) | 560 |
| BPSC00131380680□00 | 68 | 20,30 | 1 kHz,1 V | 0.12 | 2.8(4.1) | 680 |
| BPSC00131380820□00 | 82 | 20,30 | 1 kHz,1 V | 0.16 | 2.7(4.0) | 820 |
| BPSC00131380101□00 | 100 | 20,30 | 1 kHz,1 V | 0.17 | 2.5(3.5) | 101 |
| BPSC00131380121□00 | 120 | 20,30 | 1 kHz,1 V | 0.19 | 2.2(3.2) | 121 |
| BPSC00131380151□00 | 150 | 20,30 | 1 kHz,1 V | 0.25 | 2.0(2.9) | 151 |
| BPSC00131380181□00 | 180 | 20,30 | 1 kHz,1 V | 0.31 | 1.8(2.6) | 181 |
| BPSC00131380221□00 | 220 | 20,30 | 1 kHz,1 V | 0.35 | 1.7(2.4) | 221 |
| BPSC00131380271□00 | 270 | 20,30 | 1 kHz,1 V | 0.43 | 1.5(2.2) | 271 |
| BPSC00131380331□00 | 330 | 20,30 | 1 kHz,1 V | 0.51 | 1.2(2.0) | 331 |
| BPSC00131380391□00 | 390 | 20,30 | 1 kHz,1 V | 0.6 | 1.1(1.6) | 391 |
| BPSC00131380471□00 | 470 | 20,30 | 1 kHz,1 V | 0.71 | 0.99(1.6) | 471 |
| BPSC00131380561□00 | 560 | 20,30 | 1 kHz,1 V | 0.88 | 0.95(1.4) | 561 |
| BPSC00131380681□00 | 680 | 20,30 | 1 kHz,1 V | 1.04 | 0.84(1.2) | 681 |
| BPSC00131380821□00 | 820 | 20,30 | 1 kHz,1 V | 1.36 | 0.77(1.1) | 821 |
| BPSC00131380102□00 | 1000 | 20,30 | 1 kHz,1 V | 1.66 | 0.73(1.0) | 102 |

**Note: When ordering, please specify tolerance code. Tolerance: M=±20% , T=±30% , N=+40% -20%**

- Operating temperature range－40℃～125℃(Including self - temperature rise)
- Isat for Inductance drop 35% from its value with current
- Measure Equipment：
  L：Agilent/ E4980 or HP4284A (under 1MHz), HP4285A (over 1MHz)
  RDC：Chroma 16502
  Isat：HP4284+42841A or WK3260B+WK3265B

## Electrical Characteristics

| Part Number | Inductance (μH) | Tolerance (±%) | Test Frequency | RDC (Ω) Max. | Isat (A)Max. | Irms (A)Typ. | Marking |
|---|---|---|---|---|---|---|---|
| BPSC001313101R0□00 | 1 | 30 | 100kHz, 0.1V | 0.0055 | 19.90 | 11.6 | 1R0 |
| BPSC001313101R8□00 | 1.8 | 30 | 100kHz, 0.1V | 0.0065 | 13.40 | 11 | 1R8 |
| BPSC001313102R0□00 | 2 | 30 | 100kHz, 0.1V | 0.0070 | 12.90 | 10.7 | 2R0 |
| BPSC001313102R2□00 | 2.2 | 20,30 | 100kHz, 0.1V | 0.0070 | 12.90 | 10.7 | 2R2 |
| BPSC001313102R5□00 | 2.5 | 30 | 100kHz, 0.1V | 0.0080 | 12.16 | 10.3 | 2R5 |
| BPSC001313103R5□00 | 3.5 | 30 | 100kHz, 0.1V | 0.0097 | 12.00 | 8.7 | 3R5 |
| BPSC001313103R6□00 | 3.6 | 30 | 100kHz, 0.1V | 0.0100 | 12.00 | 8.7 | 3R6 |
| BPSC001313104R7□00 | 4.7 | 20,30 | 100kHz, 0.1V | 0.0110 | 11.00 | 8.4 | 4R7 |
| BPSC001313105R8□00 | 5.8 | 30 | 100kHz, 0.1V | 0.0113 | 10.50 | 7.6 | 5R8 |
| BPSC001313106R8□00 | 6.8 | 20,30 | 100kHz, 0.1V | 0.0115 | 10.00 | 7.1 | 6R8 |
| BPSC001313107R5□00 | 7.5 | 20,30 | 100kHz, 0.1V | 0.0140 | 8.48 | 6.8 | 7R5 |
| BPSC001313108R2□00 | 8.2 | 20,30 | 100kHz, 0.1V | 0.0160 | 8.30 | 6.7 | 8R2 |
| BPSC00131310100□00 | 10 | 20,30 | 100kHz, 0.1V | 0.0170 | 8.20 | 6.95 | 100 |
| BPSC00131310120□00 | 12 | 20,30 | 100kHz, 0.1V | 0.0185 | 7.04 | 6.2 | 120 |
| BPSC00131310150□00 | 15 | 20,30 | 100kHz, 0.1V | 0.025 | 5.80 | 5.22 | 150 |
| BPSC00131310220□00 | 22 | 20,30 | 100kHz, 0.1V | 0.029 | 5.12 | 4.95 | 220 |
| BPSC00131310330□00 | 33 | 20,30 | 100kHz, 0.1V | 0.053 | 4.25 | 3.6 | 330 |
| BPSC00131310470□00 | 47 | 20,30 | 100kHz, 0.1V | 0.063 | 3.60 | 3.45 | 470 |
| BPSC00131310560□00 | 56 | 20,30 | 100kHz, 0.1V | 0.068 | 2.85 | 2.95 | 560 |
| BPSC00131310680□00 | 68 | 20,30 | 100kHz, 0.1V | 0.093 | 2.76 | 2.85 | 680 |
| BPSC00131310820□00 | 82 | 20,30 | 100kHz, 0.1V | 0.099 | 2.62 | 2.6 | 820 |
| BPSC00131310850□00 | 85 | 20,30 | 100kHz, 0.1V | 0.120 | 2.60 | 2.6 | 850 |
| BPSC00131310101□00 | 100 | 20,30 | 100kHz, 0.1V | 0.126 | 2.31 | 2.45 | 101 |
| BPSC00131310121□00 | 120 | 20,30 | 100kHz, 0.1V | 0.154 | 2.05 | 2.2 | 121 |
| BPSC00131310151□00 | 150 | 20,30 | 100kHz, 0.1V | 0.174 | 1.80 | 1.9 | 151 |
| BPSC00131310181□00 | 180 | 20,30 | 100kHz, 0.1V | 0.191 | 1.66 | 1.86 | 181 |
| BPSC00131310221□00 | 220 | 20,30 | 100kHz, 0.1V | 0.246 | 1.64 | 1.72 | 221 |
| BPSC00131310331□00 | 330 | 20,30 | 100kHz, 0.1V | 0.386 | 1.28 | 1.28 | 331 |
| BPSC00131310391□00 | 390 | 20,30 | 100kHz, 0.1V | 0.440 | 1.20 | 1.27 | 391 |
| BPSC00131310471□00 | 470 | 20,30 | 100kHz, 0.1V | 0.471 | 1.06 | 1.25 | 471 |

**Note: When ordering, please specify tolerance code. Tolerance: M=±20% , T=±30%**

- Operating temperature range－40℃～125℃(Including self - temperature rise)
- Isat for Inductance drop 25% from its value with current
- Irms for a 40℃ temperature rise from 25℃ ambient
- Measure Equipment：
  L：Agilent/ E4980 or HP4284A (under 1MHz), HP4285A (over 1MHz)
  RDC：Chroma 16502
  Isat：HP4284+42841A or WK3260B+WK3265B
  Irms：HP4284+42841A or WK3260B+WK3265B

*Electrical Characteristics*

| Part Number | Inductance (μH) | Tolerance (±%) | Test Frequency | RDC (Ω) Max. | Isat (A)Max. | Irms (A)Typ. | Marking |
|---|---|---|---|---|---|---|---|
| BPSC00131310561□00 | 560 | 20,30 | 100kHz, 0.1V | 0.650 | 1.01 | 0.98 | 561 |
| BPSC00131310681□00 | 680 | 20,30 | 100kHz, 0.1V | 0.730 | 0.83 | 0.96 | 681 |
| BPSC00131310821□00 | 820 | 20,30 | 100kHz, 0.1V | 0.824 | 0.81 | 0.94 | 821 |
| BPSC00131310102□00 | 1000 | 20,30 | 100kHz, 0.1V | 1.220 | 0.70 | 0.78 | 102 |
| BPSC00131310122□00 | 1200 | 20,30 | 100kHz, 0.1V | 1.330 | 0.64 | 0.79 | 122 |
| BPSC00131310152□00 | 1500 | 20,30 | 100kHz, 0.1V | 1.990 | 0.56 | 0.58 | 152 |
| BPSC00131310182□00 | 1800 | 20,30 | 100kHz, 0.1V | 2.180 | 0.48 | 0.54 | 182 |
| BPSC00131310222□00 | 2200 | 20,30 | 100kHz, 0.1V | 2.580 | 0.43 | 0.52 | 222 |
| BPSC00131310332□00 | 3300 | 20,30 | 100kHz, 0.1V | 4.600 | 0.30 | 0.4 | 332 |

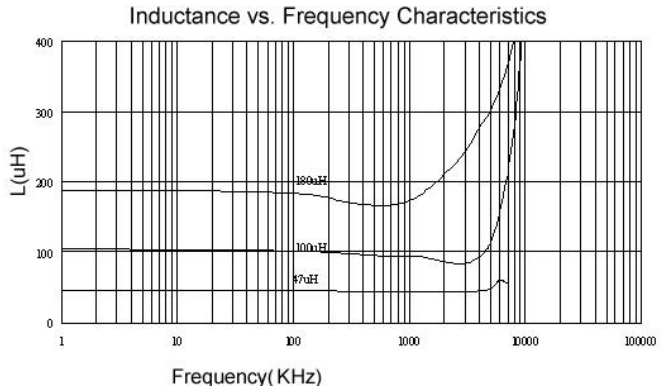
**Note: When ordering, please specify tolerance code. Tolerance: M=±20% , T=±30%**

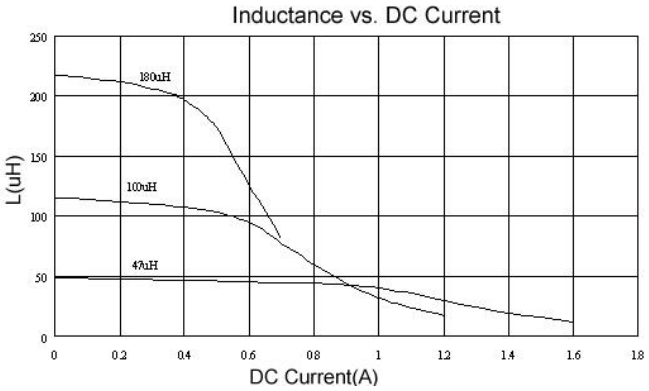
- Operating temperature range－40℃～125℃(Including self - temperature rise)
- Isat for Inductance drop 25% from its value with current
- Irms for a 40℃ temperature rise from 25℃ ambient
- Measure Equipment：
  L：Agilent/ E4980 or HP4284A (under 1MHz), HP4285A (over 1MHz)
  RDC：Chroma 16502
  Isat：HP4284+42841A or WK3260B+WK3265B
  Irms：HP4284+42841A or WK3260B+WK3265B

## Curves of BPSC Series

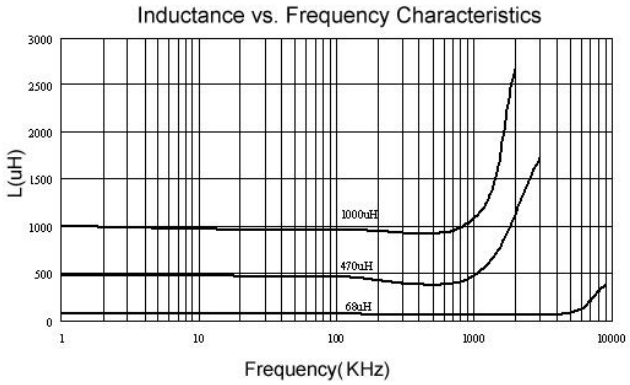
**Test Instruments**：HP4294 Impedance / Material Analyzer

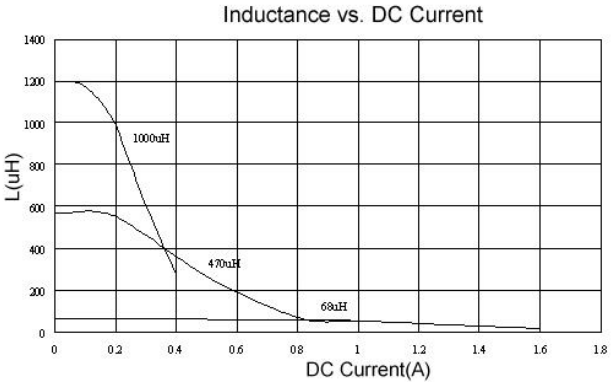
**BPSC00070734**



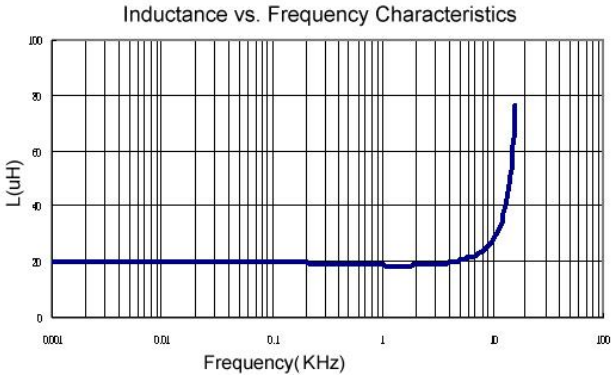



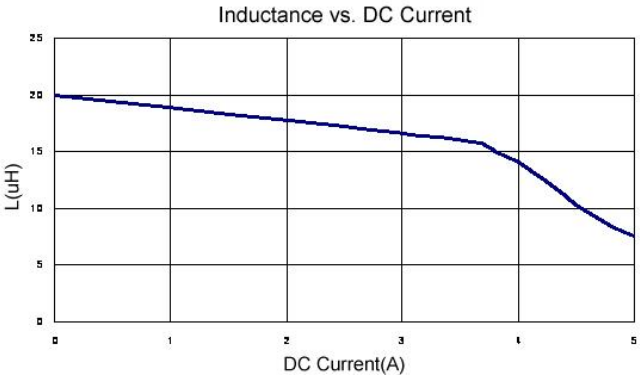

**BPSC00070745**



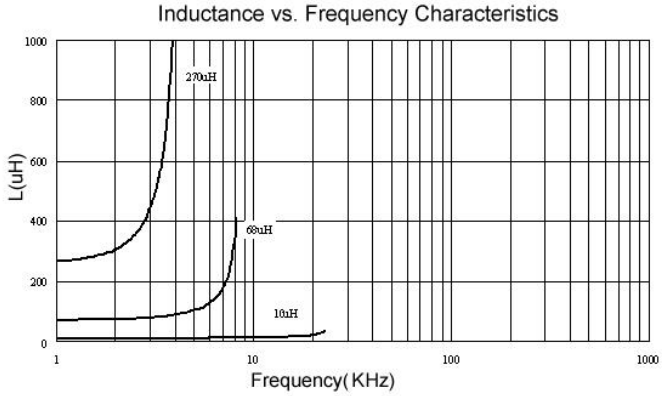



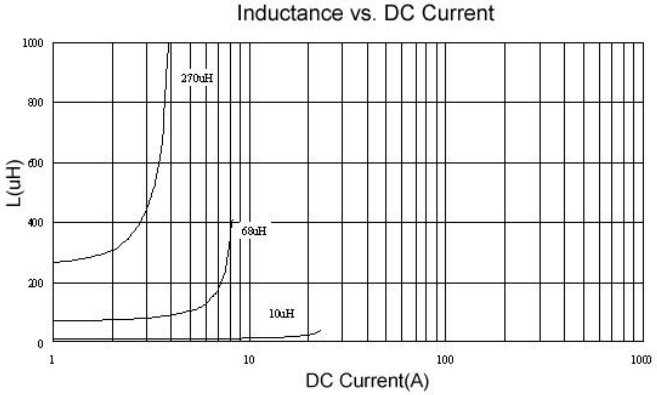

**BPSC00101140**



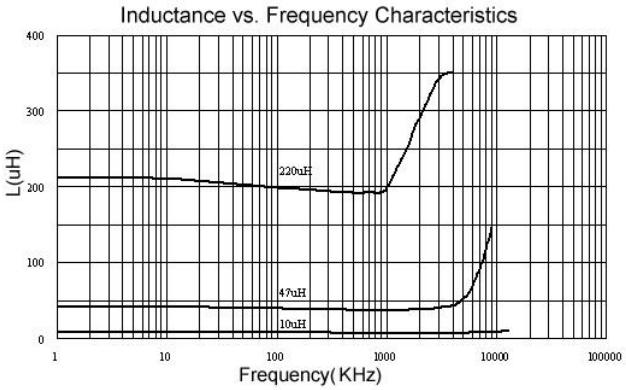

**BPSC00131345**

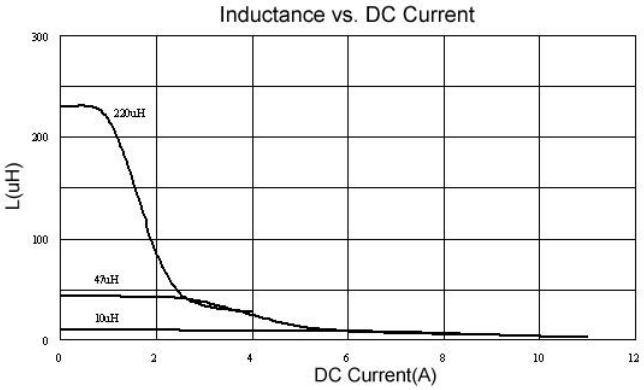


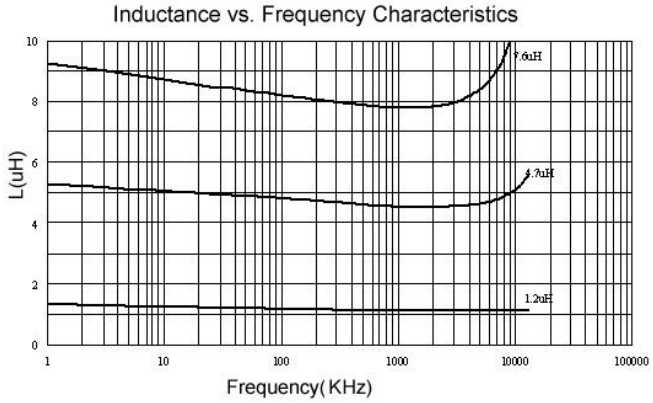
# SMD Shielded Power Inductors - BPSC Series

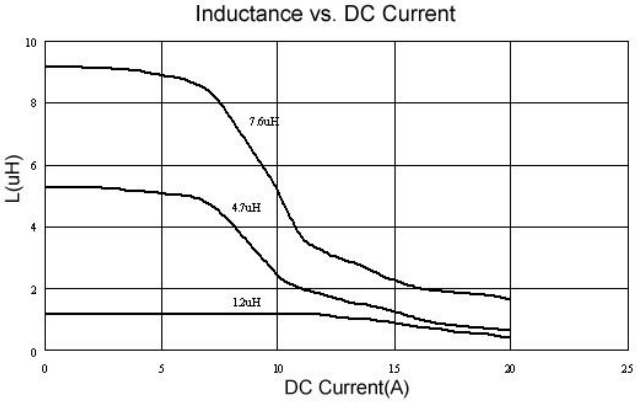
**BPSC00131360**



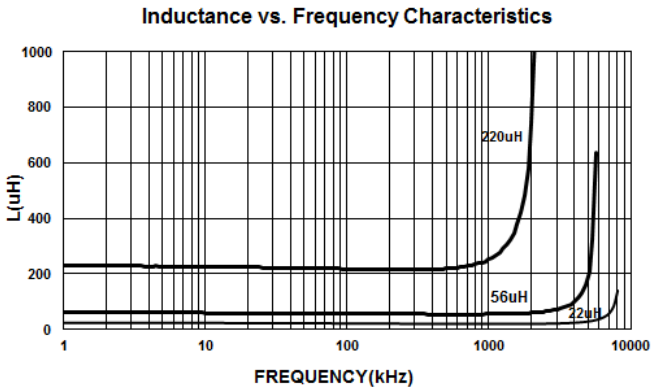



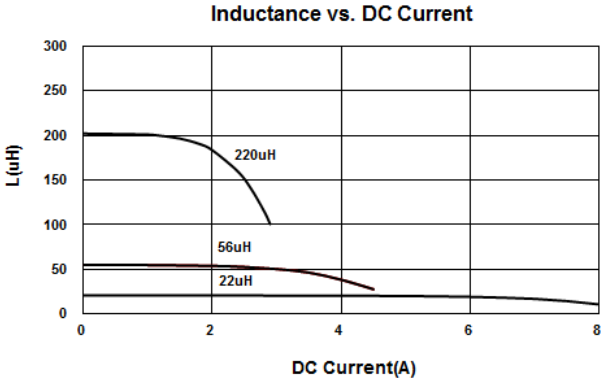

**BPSC00131380**



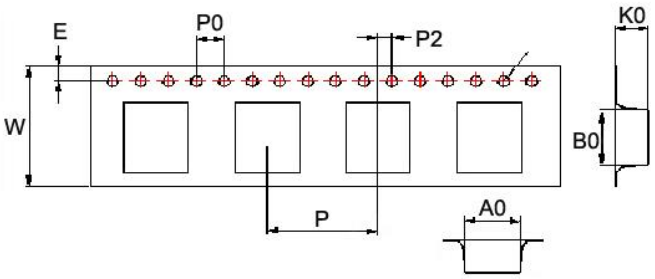

**BPSC00131310**



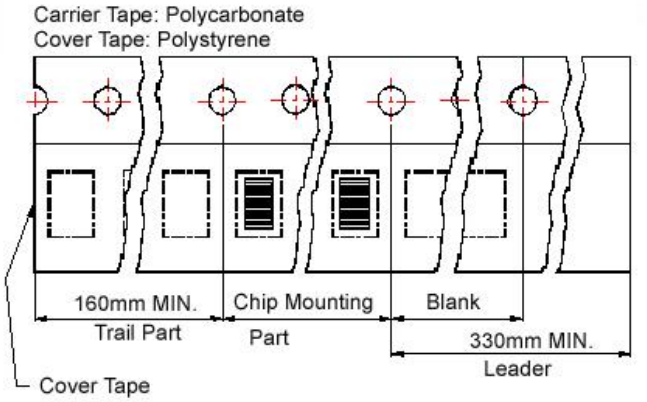



## Packaging Specifications

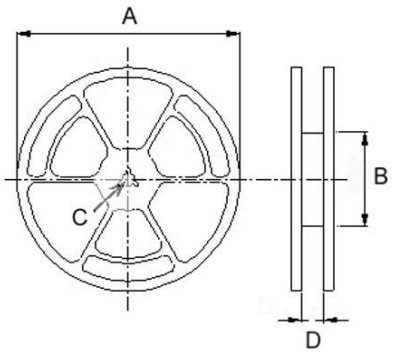
### Tape Dimensions




### Tape Material




### Reel Dimensions




**Dimensions in mm**

| TYPE | Tape Dimensions | | | | | | | | | Reel Dimensions | | | | Quantity |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | A0 | B0 | K0 | D | E | W | P | P0 | P2 | A | B | C | D | PCS / REEL |
| BPSC00070734 | 7.6 | 7.6 | 3.6 | 1.55 | 1.75 | 16 | 12 | 4 | 2 | 330 | 100 | 13 | 16.0 | 1600 |
| BPSC00070745 | 7.6 | 7.6 | 5.0 | 1.55 | 1.75 | 16 | 12 | 4 | 2 | 330 | 100 | 13 | 16.0 | 1000 |
| BPSC00101131 | 10.6 | 10.75 | 4.2 | 1.55 | 1.75 | 24 | 16 | 4 | 2 | 300 | 100 | 13 | 24.4 | 1000 |
| BPSC00101140 | 10.6 | 10.75 | 4.2 | 1.5 | 1.75 | 24 | 16 | 4 | 2 | 330 | 100 | 13 | 24.4 | 1000 |
| BPSC00101151 | 10.6 | 10.6 | 5.0 | 1.5 | 1.75 | 24 | 16 | 4 | 2 | 330 | 100 | 13 | 24.4 | 500 |
| BPSC00131345 | 13.0 | 12.8 | 5.1 | 1.55 | 1.75 | 24 | 16 | 4 | 2 | 330 | 100 | 13 | 24.4 | 500 |
| BPSC00131360 | 12.6 | 12.6 | 6.7 | 1.55 | 1.75 | 24 | 16 | 4 | 2 | 330 | 100 | 13 | 24.4 | 600 |
| BPSC00131380 | 12.6 | 12.6 | 8.7 | 1.55 | 1.75 | 24 | 16 | 4 | 2 | 330 | 100 | 13 | 24.4 | 500 |
| BPSC00131310 | 12.7 | 12.7 | 10.2 | 1.55 | 1.75 | 24 | 24 | 4 | 2 | 330 | 100 | 13 | 24.4 | 250 |

# BPSC Series

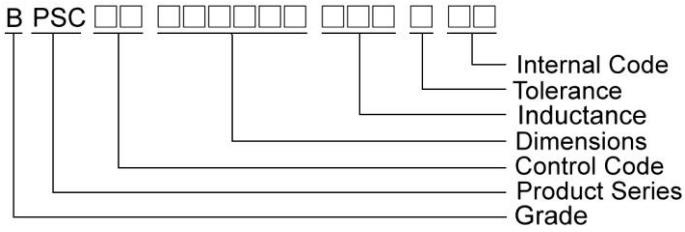

## Features

- RoHS, Halogen Free and REACH Compliance
- Magnetic shielded
- Various package size and wide inductance range

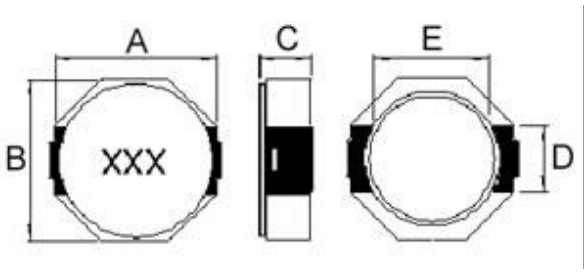
## Applications

- AP Routers
- STBs
- LCD TVs and monitors
- Game consoles
- LED lightings
- DC/DC converters

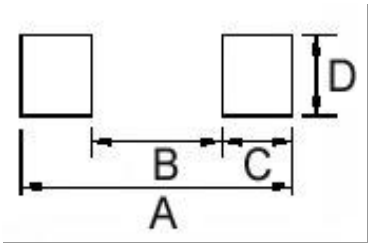
## Product Identification




## Shapes and Dimensions




## Recommended Pattern




Dimension in mm

| TYPE | A | B | C | D | E |
|---|---|---|---|---|---|
| BPSC00080845 | $8.3^{+0}$ | $8.3^{+0}$ | $4.5^{+0}$ | 2.5 | 6.3 |

Dimension in mm

| TYPE | A | B | C | D |
|---|---|---|---|---|
| BPSC00080845 | 10.1 | 6.1 | 2.0 | 2.8 |

Pulse a YAGEO company

CHILISIN ELECTRONICS CORP.

## Electrical Characteristics

| Part Number | Inductance (μH) | Tolerance (±%) | Test Frequency (kHz) | RDC (mΩ) Max | Rated Current (A) | Marking |
|---|---|---|---|---|---|---|
| BPSC000808453R3□00 | 3.3 | 20 | 100 | 19 | 5.7 | 3R3 |
| BPSC000808454R7□00 | 4.7 | 20 | 100 | 22 | 5.6 | 4R7 |
| BPSC000808456R8□00 | 6.8 | 20 | 100 | 25 | 4.4 | 6R8 |
| BPSC00080845100□00 | 10 | 20 | 100 | 36 | 4.0 | 100 |
| BPSC00080845150□00 | 15 | 20 | 100 | 53 | 2.9 | 150 |
| BPSC00080845220□00 | 22 | 20 | 100 | 75 | 2.4 | 220 |
| BPSC00080845470□00 | 47 | 20 | 100 | 150 | 1.8 | 470 |
| BPSC00080845680□00 | 68 | 20 | 100 | 240 | 1.5 | 680 |
| BPSC00080845101□00 | 100 | 20 | 100 | 353 | 1.1 | 101 |

**Note: When ordering, please specify tolerance code. Tolerance: M=±20%**

- Operating temperature range－30℃～100℃(Including self - temperature rise)
- Rated current for Inductance drop 35% from its value with current
- Measure Equipment：

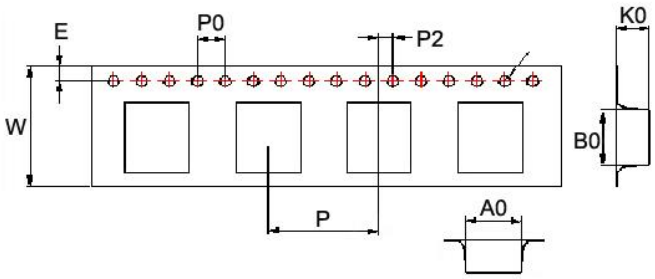
  L：HP4284A 100kHz/1V

  RDC：Chroma 16502

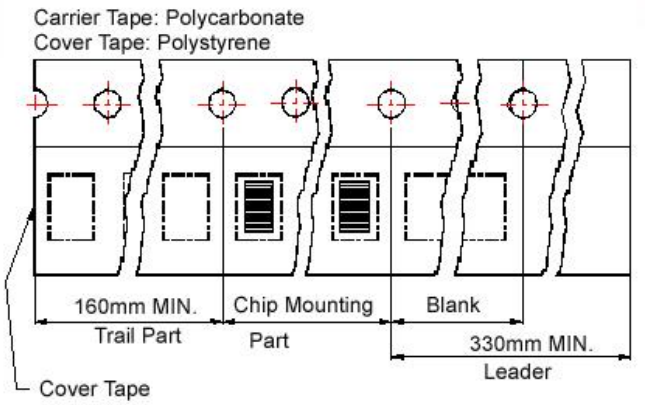
  Rated current：HP4284+42841A

## Packaging Specifications

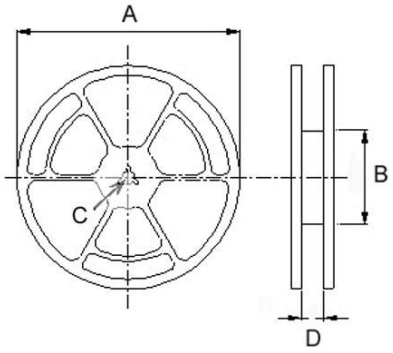
**Tape Dimensions**




**Tape Material**




**Reel Dimensions**




**Dimensions in mm**

| TYPE | Tape Dimensions | | | | | | | | | Reel Dimensions | | | | Quantity |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | A0 | B0 | K0 | D | E | W | P | P0 | P2 | A | B | C | D | PCS / REEL |
| BPSC00080845 | 8.4 | 9.9 | 4.8 | 1.55 | 1.75 | 24 | 12 | 4 | 2 | 330 | 100 | 13 | 24.4 | 1000 |

## Looking for pricing, stock, or lifecycle information?

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- Chilisin Information

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- Excess Inventory Management